

J. Efrim Boritz
CURRICULUM VITAE
May 2023



My work involves investigating areas of professional practice in external auditing and internal auditing which rely on the exercise of professional judgment, particularly in the context of information systems. My research aims at identifying factors affecting judgment processes and systematic determinants of judgment quality. I am particularly interested in judgment enhancement through improvements in the quality of the information and models used by professionals.

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Academic Degrees/Rank

Ph.D.	University of Minnesota	1983
M.B.A.	York University	1974
B.A.	York University	1972

Rank Tenured Full Professor

Professional Designations

Chartered Professional Accountant (CPA)	2013
Certified Information Systems Auditor (CISA)	1979
Chartered Accountant (CA)	1976

Awards & Distinctions

Ontario CPAs' Chair in Accounting University of Waterloo, School of Accounting & Finance	2002-present
Canadian Accounting Hall of Fame	2023
Best Paper Award. "Factors Affecting Individuals' Susceptibility to Cyber Attacks" with Katharine Elizabeth Patterson and Jessie Ge, International Symposium on Accounting Information Systems held at Michigan State University, June 27-28, 2019.	2019
Haim Falk Award for Distinguished Contribution to Accounting Thought Canadian Academic Accounting Association	2018

¹ Name changed from "School of Accountancy" in 2008

Nominated for Lifetime Volunteer Award CPA Canada CPA Canada	2016
Outstanding Educator Award for 2015, Strategic and Emerging Technologies (SET) section of the American Accounting Association	2015
Fellow of the Institute of Chartered Professional Accountants of Ontario (FCPA) Institute of Chartered Professional Accountants of Ontario	2013
Queen Elizabeth II Diamond Jubilee Medal	2012
Bill Swirsky Innovation Award Canadian Institute of Chartered Accountants	2010
Best Paper Award. “Do Companies’ Online Privacy Policy Disclosure Meet Customers’ Needs?” with Won Gyun No. World Congress on Privacy, Security, Trust and the Management of e-Business August 25-27, 2009 in Saint John, NB.	2009
George Baxter Distinguished Service Award Canadian Academic Accounting Association	2009
Best Paper Award. “IT Control Weaknesses, IT Governance and Firm Performance” with Jee-Hae Lim. AAA Mid-Year Meeting of the IS Section, Jan 11-12, 2008.	2008
L.S. Rosen Outstanding Educator Award Canadian Academic Accounting Association	2006
Award of Outstanding Merit Institute of Chartered Accountants of Ontario	1999
Ernst & Young Professor of Accounting	1993-2002
Fellow of the Institute of Chartered Accountants of Ontario (FCA) Institute of Chartered Accountants of Ontario	1988
Nominated for Institute of Internal Auditors Educator of the Year award by Toronto Chapter 1986, 1987; Ottawa Chapter 1988; Central Florida Chapter	1989
Institute of Chartered Accountants of Ontario Doctoral Fellow Institute of Chartered Accountants of Ontario	1986
Haugen, Edson, Ostby & Company Scholarship University of Minnesota	1981
Pillsbury Foundation Scholarship University of Minnesota	1980

Employment History

<u>Years</u>	<u>Position/Rank</u>	<u>Employer</u>
1998 - present	Director, Centre for Information Systems Assurance	University of Waterloo
1993 - present	Full Professor School of Accounting and Finance	University of Waterloo
1992 - 1994	Associate Director & Director of Professional Programs School of Accountancy	University of Waterloo
1986 - 1993	Tenured, Associate Professor	University of Waterloo
1984 - present	Head, Assurance/IT Areas	University of Waterloo
1983 - 1986	Assistant Professor, Auditing	University of Waterloo
1978 - 1979	Manager, National Auditing Standards	Clarkson, Gordon & Company Chartered Accountants
1976 - 1978	Computer Audit Specialist	Clarkson, Gordon & Company Chartered Accountants
1974 - 1976	Staff Accountant	Clarkson, Gordon & Company Chartered Accountants

Part-time Lecturing Activities:

1979 - 1983	University of Minnesota School of Management
1979 - 1983	CPA Coaching Series Lecturer University of Minnesota
1976 - 1978	York University Graduate Business School
1976 - 1979	Co-Administrator and Lecturer York University C.A. Finalists' School
1975 - 1977	Certified General Accountants Association

Professional Service Activities

Current Service

Member of:	Task Force on Cyber Security Assurance American Institute of Certified Public Accountants	2015-present
Member of:	Task Force on Trust Services/Information Integrity American Institute of Certified Public Accountants	2008-present
Director of:	University of Waterloo Centre for Information Integrity and Information Systems Assurance	1998-present
Member of:	AAA Notable Contribution to Accounting Literature Committee	2021-2022
Member of:	AAA Publication Committee	2021-2022

Past Service

Member of:	Assurance Innovation Committee CPA (Chartered Professional Accountants) Canada	2016-2020
Chair	Nominating Committee for the Director of the Canadian Accounting Hall of Fame	2019
Member of:	IT Competency Map Task Revision Force CPA (Chartered Professional Accountants) Canada	2016-2019
Member of:	Study Group on Information Integrity CPA (Chartered Professional Accountants) Canada	2007-2019
Member of:	Task Force on Data Analytics American Institute of Certified Public Accountants	2015-2018
Member of:	AP Editor Search Committee Canadian Academic Accounting Association	2015-2016
Member of:	Information Management & IT Advisory Council (IMTAC) CPA Canada	2006-2016
Chair:	George Baxter Award Committee, Canadian Academic Accounting Association	2010-2011
Member of:	Assurance Working Group XBRL International	2005-2006, 2010-2011
Member of:	Academic Interest Group XBRL International	2009-2011
Member of:	Board of Directors	1996-2001, 2006-2010

	Canadian Academic Accounting Association (CAAA)	
Member of:	Board of the IT Alliance of the Canadian Institute of Chartered Accountants (Chair of the Education Committee 2000-2009)	2000-2010
Member of:	Study Group on Data Level Assurance Canadian Institute of Chartered Accountants	2008-2009
Member of:	XBRL Assurance Task Force American Institute of Certified Public Accountants (I was the only non-US member of this task force)	2006-2008
Member of:	Accounting Standards Oversight Council Representative of the CAAA	2000-2008
Member of:	Study Group on Computer Assisted Audit Techniques Canadian Institute of Chartered Accountants	2005-2006
Member of:	Study Group on Going Concern Assumption Canadian Institute of Chartered Accountants	2004-2006
Member of	International Curriculum Committee Information Systems Audit and Control Association, (I was the only Canadian member of this task force)	2002-2004
Member of:	Executive Committee CA Exchange (the Micro Computer Interest Group of the Canadian Institute of Chartered Accountants)	1999-2002
Member of:	Task Force on System Reliability Assurance/Trust Services American Institute of Certified Public Accountants/ Canadian Institute of Chartered Accountants	1998-2002
President of:	Canadian Academic Accounting Association	1999-2000
Canadian Representative	International Liaison Committee Auditing Section, American Accounting Association	1993-1999
Chair:	Membership Committee Canadian Academic Accounting Association	1996-1998
Member of:	Task Force on Assurance Services Canadian Institute of Chartered Accountants	1995-1998
Member of:	Research Committee Canadian Academic Accounting Association	1995-1996
Member of:	Accounting Standards Board Canadian Institute of Chartered Accountants	1993-1996

Member of:	Council of the Institute of Chartered Accountants of Ontario	1991-1996
Member of:	Outstanding Accounting Educator Award Committee American Accounting Association	1993-1994
Member of:	Audit Judgment Study Advisory Group of the Canadian Institute of Chartered Accountants	1992-1994
Member of:	Education Symposium Task Force of the Canadian Institute of Chartered Accountants	1989-1990
Member of:	Information Technology Task Force of the Canadian Institute of Chartered Accountants	1989-1990
Member of:	Systems Auditability and Control Project Task Force of the Institute of Internal Auditors	1989
Member of:	Auditing Standards Committee of the Canadian Institute of Chartered Accountants	1985-1987
Member of:	Education Committee of the Auditing Section, American Accounting Association	1984-1986

Editorial and Review Service

Editor	Co-Senior Editor with Theo Stratopoulos <u>Journal of Information Systems (AAA)</u>	2020-2022
	Editor-in-Chief, <u>Managerial Auditing Journal</u> (Emerald)	2016-2018
	Associate Editor, <u>Journal of Emerging Technologies in Accounting (AAA)</u>	2014-present
	Editor-in-Chief, <u>Accounting Perspectives (CAAA)</u>	2006-2010
	<u>CA Magazine</u> , Education Column	1987-1990
Editorial Boards:	<u>Journal of Emerging Technologies in Accounting</u>	2014-present
	<u>Journal of Information Systems</u>	2013-present
	<u>Accounting Horizons</u>	2009-present
	<u>Current Issues in Auditing</u>	2007-present
	<u>International Journal of Accounting Information Systems</u>	2000-present
	<u>Contemporary Accounting Research</u>	1990-2010
	<u>Issues in Accounting Education</u>	2004-2007
	<u>International Journal of Auditing</u>	1997-2006
	<u>Auditing: A Journal of Practice & Theory</u>	1983-2000
Guest Editor	<u>International Journal of Accounting Information Systems</u> special issue on Information Integrity and Information Systems Assurance	Sept 2022

Guest Editor	<u>International Journal of Accounting Information Systems</u> special issue on Information Integrity and Information Systems Assurance	Sept 2020
Guest Editor	<u>International Journal of Accounting Information Systems</u> special issue on Information Integrity and Information Systems Assurance	Sept 2018
Guest Editor	<u>International Journal of Accounting Information Systems</u> special issue on Information Integrity and Information Systems Assurance	Sept 2016
Guest Editor	<u>International Journal of Accounting Information Systems</u> special issue on Information Integrity and Information Systems Assurance	Dec 2014
Guest Editor	<u>International Journal of Accounting Information Systems</u> special issue on Information Integrity and Information Systems Assurance	Sept 2012
Guest Editor	<u>International Journal of Accounting Information Systems</u> special issue on Information Integrity and Information Systems Assurance	Sept 2010
Guest Editor	<u>International Journal of Accounting Information Systems</u> special issue on Information Integrity and Information Systems Assurance	June 2008
Guest Editor	<u>International Journal of Accounting Information Systems</u> special issue on IT Security, Privacy and Trust	June 2006
Guest Editor	<u>International Journal of Accounting Information Systems</u> special issue on Information Integrity,	June 2004
Guest Editor	<u>Journal of Information Systems</u> special issue on Information Systems Assurance,	June 2002
Guest Editor	<u>Journal of Information Systems</u> special issue on Information Systems Assurance,	June 1999
Invited Member of Program Committee	RELAW'10 - Third International Workshop on Requirements Engineering and Law, in conjunction with the 18th IEEE International Requirements Engineering Conference, Sept 28, 2010 Sydney, Australia	June-Sept 2010
Invited Member of Program Committee	RELAW'09 - Second International Workshop on Requirements Engineering and Law, in conjunction with the 17th IEEE International Requirements Engineering Conference, Sept 9, 2009 Atlanta, GA	June-Sept 2009
Invited Member of Program Committee	RELAW'08 - First International Workshop on Requirements Engineering and Law, in conjunction with the 16th IEEE International Requirements Engineering Conference, Sept 9, 2008 Barcelona, Catalunya, Spain	June-Sept 2008

Ad hoc Reviewer for:	<u>Accounting and Business Research</u> <u>Accounting Horizons</u> <u>The Accounting Review</u> <u>Asia Pacific Journal of Accounting</u> <u>Communications of the ACM</u> <u>Expert Systems with Applications</u> <u>Information Systems Research</u> <u>Intelligent Systems in Accounting, Finance and Management</u> <u>Issues in Accounting Education</u> <u>Journal of Accounting, Auditing and Finance</u> <u>Journal of Business Ethics</u> A number of National Science Foundation (US) Grant Application Reviews A number of SSHRC Grant Application Reviews A number of auditing textbook reviews A number of conference paper reviews	
External Examiner:	Rutgers University, USA PhD Dissertation, He (Stanley) Li	2017
	University of Technology, Sydney, Australia PhD Dissertation, Peter Chapman	2016
	University for Mining and Technology, Freiberg, Germany PhD Dissertation, Maryam Heidari	2016
	University of Alberta PhD Dissertation, Le Luo	2010
	University of Malaya	1999-2002
	Nanyang Technological University, Singapore Master of Accounting Thesis	1993
	University of Waterloo, Department of Psychology Doctoral Thesis	1993
Academic Program Review		
	External Review of University of Toronto Masters Program in Forensic Accounting	2016
Academic Review Board of Ontario		
	External Review of Humber College's Bachelor of Commerce (Accounting)	2017
	Review of George Brown College's Bachelor of Applied Business Degree (Financial Services)	2014
	External Review of Niagara College	

Bachelor of Commerce (Accounting)	2013
External Review of Seneca College Program in International Accounting and Finance	2012
External Review of Dalhousie University's MBA (Financial Services)	2010
External Review of Humber College's Bachelor of Applied Business (Accounting)	2009
External Review of University of Toronto Rotman School's Diploma Program in Forensic Accounting	2006
External Review of Seneca College Accounting Program	2005

Other Public Service

Member of the Board and Treasurer, Toronto Fringe Festival	2015-present
Member of the Board and Treasurer, New Israel Fund	2011-present
Founder and Treasurer, K-W International Folk Dance Group	1983-1986

Memberships

American Accounting Association (AAA)
 Canadian Academic Accounting Association (CAAA)
 Canadian Institute of Chartered Professional Accountants (CICPA)
 Information System Audit and Control Association (ISACA)
 Institute of Chartered Professional Accountants of Ontario (ICPAO)
 Institute of Internal Auditors (IIA)

Research Grants

<u>Granting Agency</u>	<u>Amount</u>	<u>Years (term) of Grant</u>
<u>2021-present</u>		
ICPAO (with Louise Hayes, University of Guelph) CFO Competencies for CPAs	\$ 17,500	2021-2022
CAAA (with Louise Hayes, University of Guelph) CFO Competencies for CPAs	\$ 8,000	2021-2022
<u>2016-2020</u>		
CPAC (with Adam Vitalis and Laura Simeoni) Internal Audit Competencies for CPAs	\$ 30,000	2020-2021

CPAC (with members of the Assurance and Information Systems Areas in the SAF Assurance Solutions and Services: Current and Future Opportunities	\$ 40,000	2020-2021
CPA Alberta Education Foundation (with Lev Timoshenko, University of Calgary) Knowledge and Skill Requirement for Audits of Fair Values	\$ 20,000	2019-2020
SSHRC (with Lev Timoshenko, University of Calgary) <u>Use of External Valuation Specialists</u>	\$ 103,865	2016-2019
<u>2011 - 2015</u>		
UW SSHRC 4A Award (with Leslie Berger and Carolyn McTavish) Integrated Reporting	\$ 8,000	2015-2016
UW SSHRC 4A Award (with Leslie Berger and Carolyn McTavish) Integrated Reporting	\$ 8,000	2014-2015
UW SSHRC 4A Award (with Jee-Hae Lim) XBRL Adoption	\$ 8,000	2013-2014
CAAA/SAP (with Won Gyun No) XBRL	\$ 6,700	2013-2014
<u>2006 - 2010</u>		
SSHRC (with Jee-Hae Lim) Consequences of Internal Control Weaknesses	\$ 76,000	2010-2014
CAAA/CICA (with Louise Hayes and Jee-Hae Lim) Internal Control	\$ 10,000	2009-2010
CAAA/CICA (with Natalia Kochetova and Linda Robinson) Use of Specialists	\$ 10,000	2009-2010
SSHRC (with Sati Bandyopadhyay, UW and Guoping Liu, Ryerson)	\$ 72,275	2008-2012
UW SSHRC 4A Award (with Jee-Hae Lim)	\$ 8,000	2008-2009

Internal Control Reporting

CFERF (Canadian Financial Executives Research Foundation) Financial Reporting Awards and Earnings Quality (with Tim Bauer)	\$ 10,000	2008
CAAA/CICA (with Jee-Hae Lim) Internal Control Reporting	\$ 10,000	2007-2008
UW Starter Grant (with Jee-Hae Lim)	\$ 5,500	2007-2008
UW SSHRC 4A Award (with Sati Bandyopadhyay and Guoping Liu) Voluntary vs. Mandatory Reporting	\$ 5,000	2007-2008
CAAA/CICA (with Sati Bandyopadhyay and Guoping Liu) Voluntary vs. Mandatory Reporting	\$ 6,614	2006-2007
CAAA/Deloitte (with Linda Robinson)	\$ 10,000	2006-2007
<u>2001 - 2005</u>		
CAAA/SAP	\$ 9,000	2005-2006
KPMG/University of Illinois (with Carla Carnaghan and Paulo Alencar)	US \$ 41,850.	2004 - 2006
CAAA/Deloitte & Touche (with Carla Carnaghan) Business Model Descriptions	\$ 10,100.	2003-2004
Canadian Institute of Chartered Accountants Study on a Secure Infrastructure for E-Business	\$ 46,000.	2003-2004
Information Systems Audit & Control Association Study on Information Integrity	US \$ 35,000.	2002
International Federation of Accountants Education Committee, Study of IT Competencies	US \$ 40,000.	2000-01
<u>1996 - 2000</u>		
International Federation of Accountants Education Committee, Review Literature on Competency-Based Assessment (with Carla Carnaghan)	US \$ 7,500.	1999-00
Canadian Institute of Chartered Accountants for "Educational Uses of Information Technology" (with David Bateman of St. Mary's University)	\$ 135,000.	1997-00

1991 - 1995

Institute of Insurance and Pension Research, University of Waterloo, Travel Grant with D. Kennedy	\$ 1,000.	1993
University of Waterloo, Travel Grants (with D. Kennedy)	\$ 450.	1992
Province of Ontario, University Research Incentive Funds (URIF), "Intelligent Decision Support System for Assessing the Severity of Financial Distress"	\$ 36,742.	1991-1992
Canadian Institute of Chartered Accountants "Intelligent Decision Support System for Assessing the Severity of Financial Distress"	\$ 36,742.	1991-1992
Accounting Research Centre at U of T (with A. Wensley) for validation of CAPEX	\$ 1,500.	1991-1992

1986 - 1990

Price Waterhouse, "Expert System for Inherent Risk Assessment"	\$ 7,500.	1989
Province of Ontario, University Research Incentive Funds (URIF), "Expert System for Substantive Audit Planning"	\$ 82,825.	1988-1989
Peat, Marwick, Mitchell & Co. Chartered Accountants, Canada, "Expert System for Substantive Audit Planning"	\$ 27,075.	1988-1989
Society of Management Accountants of Canada, with Howard Armitage, Monograph on Decision Support and Expert Systems	\$ 20,000.	1987-1988
Peat, Marwick, Mitchell & Co. Chartered Accountants, Canada, "Expert System for Substantive Audit Planning"	\$ 55,750.	1986-1988
Xerox	Equipment	1986-1987
Canadian Academic Accounting Association Deloitte, Haskins & Sells/CAAA Research Grant Program, with A. Wensley	\$ 5,167.	1986-1987
Digital Equipment Corporation (under Watdec)	Equipment	1985-1987

Apple Computer Inc.	Equipment	1985-1988
<u>1980 - 1985</u>		
Centre for Accounting Research and Education, University of Waterloo "Computer Control & Audit Guide".	\$ 25,000.	1984-1986
American Accounting Association, "A Multi-Method Study of Expertise in Planning and Review by External Auditors"	US \$ 18,500.	1984-1985
Canadian Academic Accounting Association, "An Examination of the Effects of Research Methods on Planning and Review Judgments", with M. Lemon and B. Gaber	\$ 20,500.	1984-1985
Centre for Accounting Research and Education, University of Waterloo. "A Process-Oriented Analysis of Expertise in External Auditing".	\$ 21,000.	1983-1985
Centre for Accounting Research and Education, University of Waterloo "Computer Guide".	\$ 13,500.	1983-1984
Institute of Internal Auditors Research Foundation, "Automated Comprehensive Audit Planning System" (auditMASTERPLAN).	US \$ 45,000.	1983-1984
Institute of Internal Auditors Research Foundation, "Planning for the Internal Audit Function".	US \$ 13,000.	1981-1982

Other Grants and Contracts

Centre for Information Systems Assurance	approx \$ 2,400,000.	1998-2022
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I am the founding Director of this Centre, sponsored by:
The Canadian Institute of Chartered Accountants,
The Information Systems Audit and Control Association,
CaseWare IDEA Inc. and the UW Centre for Accounting Research and Education.

National Accounting Institute (Beijing, China) A joint venture with PricewaterhouseCoopers. Under auspices of World Bank "Computer Information Systems and the Auditor"	US\$ 200,000.	2003-2006
Gordon H. Cowperthwaite Foundation	\$ 20,000.	2002-2003

for Accounting Education,
 “Developing Distance Education Courses
 for IT Diploma Programs”

Institute of Chartered Accountants of Ontario, Conference on ERP Systems in Accounting Education (with Carla Carnaghan)	\$ 10,000.	2001
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Gordon H. Cowperthwaite Foundation for Accounting Education, “Enhancing IT in Accounting Curriculum” (with Carla Carnaghan)	\$ 20,000.	1999-00
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University of Waterloo <u>Centre for Accounting Research and Education</u>	\$ 20,000.	1995-1997
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Gordon H. Cowperthwaite Foundation for Accounting Education, “Multi-media approach to enhancing accounting instruction”	\$ 26,667.	1995-96
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Grant to implement Waterloo Returns Market
at the University of Waterloo,
based on Iowa Electronic Markets
(with Sati Bandyopadhyay)

Centre for Ethics in <u>Professional Accounting</u>	\$ 500,000.	1991-1996
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I am a founding member of this centre and I was actively involved
in developing the proposal that was successful in attracting funding by
the Accounting Development Fund.

The purpose of the Centre is to study the problems related to ethical
behaviour in the accounting profession and the context in which it functions
and to disseminate educational materials for the advancement of ethical conduct.

<u>Fiscal Auditing</u>	\$ 650,000.	1985-1990
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I served as Director of this CIDA Project to assist the Taxation Department (CSF)
of the Federal Revenue Secretariat (SRF) of the Brazilian Ministry of Finance;
under the auspices of ESAF (Escola de Administracao Fazendaria) in Brasilia, Brazil.

For project description, please see International Activities section of this document.

University Responsibilities

Teaching

Undergraduate

ACC 419	Electronic Commerce (with M. Argenti)	1999
ACC 443	Creative Thinking, Problem Solving and Decision Making	1987-1989
ACC 451A	Audit Strategy	1984-1995
ACC 453	Computer Control and Audit	1983-1995

Graduate

ACC 690	Professional Judgment	2011-2016
ACC 622/646/695	Electronic Commerce	1999-2009, 2011-2016
ACC 502	Computer Control & Audit/IT Governance & System Reliability	2002-2008
ACC 621	IT Governance and System Reliability Principles and Criteria	2002-2008
ACC 626/651	Auditing in a Computer Environment	1985-2008
ACC 601	Behavioural Research in Auditing	1995-1998
ACC 698	Research Project (61 students)	1985-2000
BET 609	E-Business	2003-2008, 2011
BET 610	Entrepreneurial Applications of Information Technology (with Carla Carnaghan)	2003-2004
ACC 750	PhD Seminar on Research in Auditing (biennial)	1998, 2009, 2010, 2012, 2014, 2016 2018,7, 2020, 2022
ACC 784	PhD Seminar on Behavioural Game Theory (Sue McCracken)	1996
ACC 784	PhD Seminar on IT Governance (Jennifer Jewer)	2007

University Service

Current Service

School of Accounting and Finance

Director, UWCISA	1998-present
Member, Centre for Accounting Ethics	1991-present
Member, Director Search Committee	2021-2022

Past Service

Ad Hoc Professorship Nomination Committee	2021
Promotion and Tenure Committee	1986, 1990-1992, 2000-2003, 2005-2008, 2011-2020
Recruiting Committee	2001-2009, 2016-2019
Curriculum Committee	2015-2016
Curriculum Committee, Chair	1990-1993
Assurance (Auditing and Attestation), Area Head	1984-2017
Accounting Information Systems, Area Head	2000-2014
Planning Committee	1984-2001
Director of Professional Programs	1992-1994

Associate Director	1992-1994
Graduate Committee	1991-1992
Accounting Group Computing Committee, Chair (86-89)	1983-1989
Research Committee	1986-1989
Retreat Coordinator (with S. Gunz)	1984

<u>Centre for Business, Entrepreneurship and Technology</u> Business Technology Stream Champion	2001-2008
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<u>Centre for Accounting Research & Education</u> CA Finalists Case Course, Coordinator (with D. Carter)	1985-1988
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<u>Faculty of Arts</u> Faculty of Arts Computer Users Advisory Committee	1984-1989
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Long Range Scheduling System for School of Accountancy
During 1992 I developed a long-range course scheduling system using a combination of dBase and Lotus software.

School of Accountancy Professional Programs Catalogues/Brochures/ Website

- 1996 - 2000 I supervised the development of the School's website.
- 1994 I supervised the development of a "Professional Programs" brochure for the School, using Ventura Desktop Publishing software.
- 1994 I supervised the development of a brochure for high school students.
- 1992 - 93 I supervised the development of a "Doctoral Program" brochure for the School, using Ventura Desktop Publishing software.

Curriculum Development

- School of Accountancy Data Analytics Stream	2013-present
- School of Accountancy Internal Audit Partnership with IIA	2012-present
- School of Accountancy IT Diploma Programs	2001-2009
- Centre for Business, Entrepreneurship and Technology Business Technology Stream Champion	2001-2002
- School of Accountancy, Chair of ANITA (A New Introduction to Accounting) Task Force	1993-1995
- School of Accountancy Professional Programs Policy Committee, Chair	1992-1994
- School of Accountancy Curriculum Committee, Chair	1990-1992
- Integrating Computers into the Accounting Curriculum, with H. Armitage, discussed in <u>Issues in Accounting Education</u> , Spring 1986, pp. 86-101.	1986

- Auditing Area Integrated Auditing Curriculum Development 1984-present
- “The First Auditing Course”, Canadian Academic Accountants Association Annual Conference, Vancouver, B.C., June 1-2, 1983.
- “The Second Auditing Course”, Price Waterhouse Auditing Symposium, Toronto, August 13-14, 1984.

Specific Courses

Undergraduate

- ACC 419: Electronic Commerce (with M. Argenti)
- ACC 443: Creative Thinking, Problem Solving and Decision Making
(with H. Armitage) recognized in T. J. Burns (ed.), Accounting Trends 21, (Innovative Accounting and Information Systems Course Outlines), 1987 and B. M. Mallouk (ed.) What's What in Accounting Across Canada, McGraw-Hill Ryerson, 1991.
- ACC 451: Audit Strategy, recognized in T. J. Burns (ed.), Accounting Trends XVIII (Innovative Accounting and Information Systems Course Outlines), 1984.

“Applying Self-Directed Learning Contracts to an Advanced Auditing Course”, proceedings of the Instructional Show & Tell for Ontario Universities and Colleges, held at the University of Guelph, May 25-26, 1992.
- ACC 453: Computer Control and Audit
(redeveloped into a distance education version under commission of the Institute of Chartered Accountants of Ontario).

Graduate

- ACC 601: Seminar in Behavioural Research in Auditing
- ACC 621: System Reliability
- ACC 626/651: Auditing in a Computer Environment
- ACC 622/646/695: Electronic Commerce
- ACC 690: Digital Business
- ACC 690: Topics in Assurance
- ACC 690: Professional Judgment
- ACC 784: PhD Seminar in Behavioural Game Theory
- ACC 750: PhD Seminar in Research in Auditing
- ACC 784: PhD Seminar in IT Governance
- BET 609: E-Business
- BET 610: Entrepreneurial Applications of Information Technology (with Carla Carnaghan)

Graduate Student Research Supervision

Post-Doctoral

Won G. No	2007-2008
Fletcher Lu	2004-2006

Doctoral

Thesis Supervisor (Lev Timoshenko, Accounting)	2011-2016
Thesis Co-Supervisor (Louise Hayes, Accounting)	2011-2014
Thesis Co-Supervisor (Tim Bauer, Accounting)	2009-2011
Thesis Co-Supervisor (Won G. No, Management Sciences)	2003-2007
<i>This thesis was given the 2008 Outstanding Doctoral Dissertation Award by the IS Section of the American Accounting Association.</i>	
Thesis Supervisor (Susan McCracken)	1996-1998
Thesis Co-Supervisor (A. Wensley, Management Sciences)	1985-1989
“The Feasibility of Developing a Computational Model of Assertion-Based Audit Planning Using Expert Systems Methodology”	
<i>This thesis was given the 1992 Outstanding Doctoral Dissertation Award by the IS/MAS Section of the American Accounting Association.</i>	
Thesis Committee Member (Abdullah Basiouni, Management Sciences)	2008-2012
Thesis Committee Member (Shahed Alam, Management Sciences)	2008-2011
Thesis Committee Member (Guoping Liu)	2004-2006
Thesis Committee Member (Raymond Morissette)	1996-1997
Thesis Committee Member (Ping Zhang)	1992-1995

Research Assistant Supervision

Ala Mokhtar	Anti-Phishing	2022
Pei Wang	Assurance Services	2022
Shumiao Wang	Assurance Services	2021
Ivee Che	Skepticism, Valuation Specialists	2019-2020
Jessie Ge	Trust and Suspicion in Cybersecurity Settings	2018 -2019
Kate Patterson	Professional Skepticism	2016-2020
Giselle White	Business Models	2015-2017
Linda Whittaker	Integrated Reporting	2013-2014
Chris Wong	Use of Specialists	2013-2014
Kun Huo	“Business Risk Assessment”	2012-2013
Lev Timoshenko	“XBRL”	2012-2013
Lev Timoshenko	“Quarterly Reporting”	2011-2012
Lev Timoshenko	“XBRL”	2010-2011
Kun Huo	“Quarterly Reporting”	2010-2011
Yutao Li	“Quarterly Reporting”	2010-2010
Adam Presslee	“Professional Judgment”	2009-2010
Connie Zhang	“Assurance on Interim Financial Statements”	2009-2010
Tim Bauer	“Financial Reporting Awards”	2008-2009
Louise Hayes	“Content Analysis of Audit Knowledge”	2008-2009
Tim Bauer	“Content Analysis of Strategic Auditing”	2007-2008
Leslie Berger	“Information Integrity Scorecard”	2006-2007
Tim Bauer	“Unsophisticated Investors and the Capital Markets”	2006-2007
Guoping Liu	“Assurance on Interim Financial Statements”	2006

Tom Schneider	“Content Analysis Research in Accounting”	2006
Won G. No	“XARL: Extensible Audit Reporting Language”	2002-2006
Jason Fleming	“Going Concern Reporting in Canada”	2004
Yao Tian	“Business Process Documentation Techniques”	2003
Susan McCracken	“Fraud Detection”	1998
Ping Zhang	“Internal Control”	1994
Anthony Wensley	“Computational Models of Audit Expertise”	1985-1989

Masters

M. ACC. Research Projects

One term research projects: 61 students	1985-2000
Two term research projects: 1 student	1988-1989
P. Zhang, “An Expert System Approach to Internal Control Evaluation”	

M. Sc. Research Projects (Department of Management Sciences)

Arezoo Irannejad	2011-2013
“Privacy Issues in Collaborative Technologies”	
Mohammad Roghanizad	2009-2011
“Trust in E-Commerce”	
A. Albuquerque,	1988-1990
“Predicting Corporate Failure Using a Neural Network Approach”	
P. Makulski,	1985-1987
“The Effect of Errors in Policy Data on Actuarial Reserves”	
D.S. Broca,	1984-1985
“Scheduling Internal Audit Activities”	

Other Student Supervision

Undergraduate Research Assistant Supervisor

Prem Patel	“Corporate Reporting Awards”	2016-2016
Akhil Agrawal	“IT Law”	2013-2013
Arnold Hang	“Technology in Accounting Education”	2012-2012
Tian Lei	“Financial Reporting Awards”	2010-2010
Donna Tai	“Use of Specialists”	2008-2008
Yuwei Ren	“CFO-CIO Roles”	2007-2007

Coach of University of Waterloo Team (1st place, 1993, 1995, 1998)	1993 - 1995, 1998
Accounting Case Competition for Central Ontario Universities	
Sponsored by Doane Raymond/Grant Thornton	

Publications

Books and Monographs

2011-2015

G. Trites and J.E. Boritz, E-Business: A Canadian Perspective on a Networked World, Toronto: Pearson, 4th ed., 2013, 393 pages.

Boritz, J.E., Computer Control & Audit Guide, Waterloo, Ontario: University of Waterloo Centre for Information Integrity and Information Systems Assurance, 15th ed., 2011, 580 pages.

2001-2010

G. Trites and J.E. Boritz, E-Business: A Canadian Perspective on a Networked World, Toronto: Pearson, 3rd ed., 2009, 393 pages.

Boritz, J.E., Computer Control & Audit Guide, Waterloo, Ontario: University of Waterloo Centre for Information System Assurance, 14th ed., 2008, 580 pages.

Boritz, J.E., Maintaining Quality of Capital Markets with Quality Information, study commissioned by Capital Markets Leadership Task Force, Toronto: Capital Markets Leadership Task Force, Toronto: CICA, 2006, approx 150 pages.

Boritz, J.E., Information System Assurance and Computer-Assisted Auditing, Waterloo, Ontario: University of Waterloo Centre for Information System Assurance, 2006, approx 200 pages. This is a derivative of Computer Control & Audit Guide, 2005.

Boritz, J.E., Information System Reliability, Waterloo, Ontario: University of Waterloo Centre for Information System Assurance, 2005, approx 450 pages. This is a derivative of Computer Control & Audit Guide, 2005.

Boritz, J.E., Computer Control & Audit Guide, Waterloo, Ontario: University of Waterloo Centre for Information System Assurance, 13th ed., 2005, 764 pages. (updated every two years)

Boritz, J.E., A Secure IT Infrastructure for E-Business, study commissioned by the Canadian Institute of Chartered Accountants (CICA), Toronto: CICA, 2005, 157 pages. Translated into French as Infrastructure TI sécurisée pur le commerce électronique, Toronto: CICA, 2005, 171 pages.

Boritz, J.E., Information Security: Critical Guidance for CPAs in Public Practice and Industry, Lewisville, TX: American Institute of Certified Public Accountants, 2005, approx 175 pages.

G. Trites, J.E. Boritz and D. Pugsley, E-Business: A Canadian Perspective on a Networked World, 2nd edition, Toronto: Pearson, 2005, 363 pages.

Boritz, J.E., Managing Enterprise Information Integrity: Security, Control and Audit Issues, Chicago, IL: Information Technology Governance Institute, 2004, 146 pages.

Information Technology for Professional Accountants, International Education Guideline 11, Commissioned study on behalf of the International Federation of Accountants Education Committee, 1995, 1998, 2003.

Boritz, J.E., (editor) CAAA: 25 Years of Progress 1976-2001, Toronto: Canadian Academic Accounting Association, 2001, approx 250 pages.

Independence and Objectivity: A Framework for Internal Auditors, Task Force of the Auditing Section of the American Accounting Association, chaired by Mutchler, J., J.E. Boritz, S. Chang, J. Francis, S. Maijoor, L. McDaniel, D. Prawitt, A. Schilder, J. Tsui, G. Vinten, R. Whittington, Institute of Internal Auditors Research Foundation, 2001.

Boritz, J.E., In-Depth Training on the SysTrust Principles and Criteria, New York: American Institute of Certified Public Accountants, 2001, approx 250 pages.

1991-2000

Boritz, J.E., How to Perform a SysTrustSM Engagement, New York: American Institute of Certified Public Accountants, 2000, approx 200 pages.

Boritz, J.E., SysTrustSM Service: An Overview to the New Assurance Service on System Reliability, New York: American Institute of Certified Public Accountants, 2000, approx 150 pages.

Boritz, J.E. and A.K.P. Wensley, CAPEX: A Knowledge-Based Expert System for Substantive Audit Planning, Princeton: Markus Wiener Press, 1996, 308 pages.

Armitage, H.M. and Boritz, J.E. (eds.), Decision Support and Expert Systems for Management Accountants, Society of Management Accountants of Canada, 1991, 202 pages.

Boritz, J.E., The Going Concern Assumption, Research Report, Canadian Institute of Chartered Accountants, 1991, 231 pages (also in French).

pre-1991

Boritz, J.E., Approaches to Dealing with Risk and Uncertainty, Research Report, Canadian Institute of Chartered Accountants, 1990, 132 pages (also in French).

Boritz, J.E., M. Lemon and B. Gaber, An Experimental Study of Review of Preliminary Audit Strategy, Toronto: Canadian Academic Accounting Association, 1987, 149 pages.

Boritz, J.E., Planning for the Internal Audit Function, Altamonte Springs, FL: Institute of Internal Auditors Research Foundation, 1983, 342 pages.

Chapters in Books

2011-2020

J.E. Boritz and C. Carnaghan. 2017. Competence-based Education and Assessment in the Accounting Profession in Canada and the United States. Chapter 13 in Mulder, M. (Ed.). Competence-based Vocational and Professional Education Bridging the World of Work and Education. Cham: Springer International Publishing Switzerland. <https://link.springer.com/book/10.1007/978-3-319-41713-4>

J.E. Boritz and K. Fiolleau. 2015.” Educating Accounting Professionals About Ethics and Judgment”. In Educating Professionals: Ethics and Judgment in a Changing Learning Environment edited by a committee drawn from CPA Canada and University of Toronto, Toronto: CPA Canada, 2015.

J.E. Boritz and G. Stoner. 2014.” IT in Accounting Education”. Chapter 16 in Richard M.S. Wilson (ed.) The Routledge Companion to Accounting Education London: Routledge 2014.

2001-2010

“Business Reporting with XML: XBRL (Extensible Business Reporting Language),” with Won G. No, in H. Bidgoli (ed.), Encyclopedia of the Internet, John Wiley, Vol.3, 2004, pp. 863-885.

“Assurance Reporting for XBRL: XARL (Extensible Assurance Reporting Language),” with Won G. No, in S. Roohani (ed.) Trust and Data Assurances in Capital Markets: The Role of Technology Solutions, Research Monograph sponsored by PricewaterhouseCoopers, Smithville, RI: Bryant College, March 2003, pp. 17-31.

Boritz, J.E., “Research Opportunities in Information Systems Assurance”, Chapter 11 of Future of Accounting Information Systems Research, edited by V. Arnold and S. Sutton, 2002, pp. 231-256.

1991-2000

Boritz, J.E., “Positive Accounting Theory, Management Fraud and the Auditor”, Chapter 4 of Ethics and Positive Accounting Theory, edited by G. Richardson and T. O'Malley, Centre for Accounting Ethics, University of Waterloo, 1995.

Boritz, J.E. and A.K.P. Wensley, “Validating Expert Systems”, in Miklos Vasarhelyi (ed.) Artificial Intelligence in Accounting and Auditing Vol. 2, Princeton: Markus Wiener, 1993.

Boritz, J.E., “Introduction to Decision Support and Expert Systems”, Chapter 1 in H. M. Armitage and J. E. Boritz (eds.), Decision Support and Expert Systems for Management Accountants, Society of Management Accountants of Canada, 1991.

Boritz, J., “Building Knowledge-Based Systems”, Chapter 6 in H. M. Armitage and J. E. Boritz (eds.), Decision Support and Expert Systems for Management Accountants, Society of Management Accountants of Canada, 1991.

Boritz, J.E., A. Albuquerque and R.G. Kielstra, “A Prototype Expert System for the Assessment of Inherent Risk and Prior Probability of Error”, Chapter 5 in H.M. Armitage and J.E. Boritz (eds.),

Decision Support and Expert Systems for Management Accountants, Society of Management Accountants of Canada, 1991.

pre-1991

Boritz, J.E. and D.S. Broca, “Scheduling Internal Audit Activities”, Auditing: A Journal of Practice & Theory, Fall 1986, pp. 1-19. Reprinted as a chapter in Miklos A. Vasarhelyi (ed.), Artificial Intelligence in Accounting and Auditing, New York: Markus Wiener, 1989, pp. 181-206.

Boritz, J.E., “Artificial Intelligence and Expert Systems”, Chapter 11 of A.M. Walsh and D.A. Brown, The Handbook of Information Technology, Richard De Boo, 1987.

Boritz, J.E., “Audit Judgment, Decision Support and Expert Systems,” Chapter 6 of The Internal Audit Handbook, Volume II, Part 2, Controller General's Department of the Treasury Board of Canada, 1986, 141 pages.

Articles in Refereed Scholarly Journals

2021-present

J. Efrim Boritz and Theophanis C. Stratopoulos, JIS Workshop on Data Value Creation Research: Views from Industry Leaders and AIS Researchers. *Journal of Information Systems* Forthcoming, Spring 2023

J. Efrim Boritz and Theophanis C. Stratopoulos, JIS Workshop on the Impact of AI on the Accounting Profession: Views from Industry Leaders and AIS Researchers. *Journal of Information Systems* Forthcoming Fall 2023.

Factors Affecting Employees’ Susceptibility to Cyber Attacks. with Chan (Jessie) Ge. University of Waterloo and Katharine Elizabeth Patterson, WU Vienna University of Economics and Business. *Journal of Information Systems* 36 (3) 2022: 27-60.

How Do Auditors Assess Key Inputs in a Discounted Cash Flow Model of Goodwill? with Lev M. Timoshenko, University of Calgary. *Behavioral Research in Accounting* 34 (2) 2022: 19-47.

J. Efrim Boritz and Theophanis C. Stratopoulos, JIS Workshop on Robotic Process Automation (RPA) Research: Views from RPA Industry Leaders and AIS Researchers. *Journal of Information Systems* 36 (1) 2022: 1–5.

Louise Hayes and J.E. Boritz. Classifying Restatements: An Application of Machine Learning and Textual Analysis *Journal of Information Systems* 35 (3) 2021: 107–131.

2016-2020

J.E. Boritz, Natalia Kochetova, Linda Robinson and Chris Wong. Auditors’ and Specialists’ Views about the Use of Specialists during an Audit. *Behavioral Research in Accounting*. 32 (2) 2020: 15–40.

J.E. Boritz, Louise Hayes and Lev Timoshenko. How Understandable are SOX 404 Reports? *International Journal of Accounting Information Systems*. Volume 39 (December) 2020: 1-22.

He Li, Won G. No and J.E. Boritz. Are External Auditors Concerned about Cyber Incidents? Evidence from Audit Fees. *Auditing: A Journal of Practice & Theory*. 39 (1) 2020: 151-171.

J.E. Boritz and Won G. No. How Significant are the Differences in Financial Data Provided by key Data Sources? A Comparison of XBRL Compustat, Yahoo! Finance, and Google Finance. *Journal of Information Systems* 34 (3) 2020: 47–75.

Boritz, J.E., Jap Efendi, and Jee-Hae Lim. The Impact of Senior Management Competencies on the Voluntary Adoption of an Innovative Technology. *Journal of Information Systems* Vol. 32, No. 2 (Summer) 2018: 25–46.

Boritz, J.E., Louise Hayes and Lev Timoshenko. Determinants of the Readability of SOX 404 Reports. *Journal of Emerging Technologies in Accounting* Vol. 13, No. 2 (Fall) 2016: 145-168.

Boritz, J.E. and Won Gyun No. Computer-Assisted Functions for Auditing XBRL-Related Documents. *Journal of Emerging Technologies in Accounting* Vol. 13, No. 1 (Spring) 2016: 53-83.

2011-2015

Boritz, J.E., Natalia Kochetova-Kozloski and Linda Robinson. “Are Fraud Specialists Relatively More Effective than Auditors at Modifying Audit Programs in the Presence of Fraud Risk?” *The Accounting Review* Vol. 90 No. 3 (May) 2015: 881-915.

Boritz, J.E. and Lev Timoshenko. “Firm-Specific Characteristics of the SEC’s XBRL Voluntary Filing Program” *Journal of Information Systems* Vol. 29, No. 1 (Spring) 2015: 9-36.

Boritz, J.E., Carla Carnaghan and Paulo Alencar. “Business Modeling to improve auditor risk assessment: An investigation of alternative representations” *Journal of Information Systems* Vol. 28, No. 2 (Fall) 2014: 231-256.

Boritz, J.E. and Lev Timoshenko. “On the Use of Checklists in Auditing: A Commentary” *Current Issues in Auditing* Vol. 8, No. 1 2014: C1-25.

Boritz, J.E., L. Hayes and J. Lim, “A Content Analysis of Auditors’ Reports on IT Internal Control Weaknesses: The comparative advantages of an automated approach to control weakness identification” *International Journal of Accounting Information Systems* Vol. 14, No. 2 (June) 2013: 138-163.

Berger, L. and J.E. Boritz, “Accounting Students’ Sensitivity to Attributes of Information Integrity” *Issues in Accounting Education* Vol. 27, No. 4 (Fall) 2012: 867–893.

Boritz, J.E., F. Borthick and A. Presslee, “The Effects of Business Process Representation Type on the Assessment of Business and Control Risk: Diagrams Versus Narratives” *Issues in Accounting Education* Vol. 27, No. 4 (Fall) 2012: 895–915.

Boritz, J.E. and L. Robinson, Book Review: AL ROSEN and MARK ROSEN, \$WINDLERS\$: Cons & Cheats and How to Protect your Investment from Them (Toronto, ON, Canada: Madison

Press, 2010, ISBN 978-1-897330-76-0, pp. xiv, 263). *The Accounting Review*, May 2012: 1095-1098.

Boritz, J.E. and W.G. No, "E-Commerce and Privacy: Exploring What We Know and Opportunities for Future Discovery" *Journal of Information Systems* Vol. 25, No .2 (Fall) 2011, pp. 11-45.

2006-2010

Boritz, J.E. and W.G. No, "Assurance on XBRL-Related Documents: The Case of United Technologies" *Journal of Information Systems*, Vol. 23, No. 2 (Fall 2009) 49-78.

Boritz, J.E. and W.G. No, "The SEC's XBRL Voluntary Filing Program on EDGAR: A Case for Quality Assurance" *Current Issues in Auditing*, Vol. 2, Issue 2, 2008, A36-A50.

Boritz, J.E., D.B. Kennedy and J. Sun "Predicting Business Failure in Canada," *Accounting Perspectives*, Vol. 6, No. 2 (May 2007) 141-165.

2001-2005

Boritz, J.E. "IS practitioners' views on core concepts of information integrity" *International Journal of Accounting Information Systems*, Vol. 6, No.4, 2005, pp.260-279.

Boritz, J.E. and W.G. No, "Security in XML-Based Financial Reporting Services on the Internet" *Journal of Accounting and Public Policy*, Vol. 24, No.1, 2005, pp.11-36.

Boritz, J.E. and W.G. No, "Assurance Reporting for XML-Based Information Services: XARL (Extensible Assurance Reporting Language)" *Canadian Accounting Perspectives*, Vol. 3, No. 2, 2004, pp. 207-233.

Boritz, J.E. and C.A. Carnaghan, "Competency-Based Education and Assessment for the Accounting Profession: A Critical Review" *Canadian Accounting Perspectives*, Vol. 2, No. 1, 2003, pp. 7-42.

1996-2000

Boritz, J.E. and J.H. Kearns, "1999 Information Systems Research Symposium Panel Discussion on SysTrust" *Journal of Information Systems*, Vol. 14, Supplement 2000, pp. 163-176.

Boritz, J.E. and P. Zhang, "The Auditor's Objectivity Under a Negligence Liability System" *Auditing: A Journal of Practice & Theory*, Vol. 18, Supplement 1999, pp. 147-164.

Boritz, J.E. and D. Cockburn, "1998 Audit Symposium Panel Discussion on Assurance Services" *Auditing: A Journal of Practice & Theory*, Vol. 17, Supplement 1998, pp. 131-151.

Boritz, J.E. and P. Zhang, "The Implications of Alternative Litigation Cost Allocation Systems for the Value of Audits" *Journal of Accounting, Auditing and Finance*, Vol. 12, No. 4, Fall 1997, pp. 353-372.

Boritz, J.E., "Discussion of 'Debiasing Framing Effects in Auditors' Internal Control Judgments and Testing Decisions" *Contemporary Accounting Research*, Vol. 14, No. 2, Summer 1997, pp. 79-88.

1991-1995

Boritz, J.E. and D.B. Kennedy, "Effectiveness of Neural Network Types for Prediction of Business Failure" *Expert Systems with Applications*, Vol. 9, No. 4, 1995, pp. 503-512.

Boritz, J.E., D.B. Kennedy and A. Albuquerque, "Predicting Corporate Failure Using a Neural Network Approach" *International Journal of Intelligent Systems in Accounting, Finance and Management*, June, 1995, pp. 95-111.

Boritz, J.E., P. Zhang, and S. Aldersley, "On Combining Evidence from Sub-populations into a Composite Conclusion" *Contemporary Accounting Research*, Vol. 10, No. 1, Fall 1993, pp. 227-245.

Boritz, J.E. and A.K.P. Wensley, "Evaluating Expert Systems with Complex Outputs: The Case of Audit Planning" *Auditing: A Journal of Practice & Theory*, Vol. 11, No. 2, Fall 1992, pp. 14-29.

Boritz, J.E., "Discussant's Comments on "Expert and Novice Problem-Solving Behaviour in Audit Planning" *Auditing: A Journal of Practice & Theory*, Vol. 11, Supplement 1992, pp.21-32.

Boritz, J.E. and A.K.P. Wensley, "An Expert Systems Approach to Substantive Audit Planning" *Expert Systems with Applications*, Vol. 3, pp. 27-49, January 1991.

1985-1990

Boritz, J.E. and A.K.P. Wensley, "Structuring the Assessment of Audit Evidence - An Expert Systems Approach" *Auditing: A Journal of Practice & Theory*, Vol. 9, Supplement 1990, pp. 49-87.

Boritz, J.E., B.G. Gaber and W.M. Lemon, "An Experimental Study of the Effects of Elicitation Methods on Review of Preliminary Audit Strategy by External Auditors" *Contemporary Accounting Research*, Vol. 4, No. 2, Spring 1988, pp. 392-411.

Boritz, J.E. and D.S. Broca, "Scheduling Internal Audit Activities" *Auditing: A Journal of Practice & Theory*, Vol. 6, No. 1, Fall 1986, pp. 1-19.

Boritz, J.E., "The Effect of Research Method on Audit Planning and Review Judgments" *Journal of Accounting Research*, Vol. 24, No. 2, Autumn 1986, pp. 335-348.

Armitage, H.M. and J.E. Boritz, "Integrating Computers into the Accounting Curriculum" *Issues in Accounting Education*, Vol. 1, No. 1, Spring 1986, pp. 86-101.

Boritz, J.E., "The Effect of Information Presentation Methods on Audit Planning and Review Judgments" *Contemporary Accounting Research*, Vol. 1, No. 2, 1985, pp. 193-218.

Articles in Refereed Published Proceedings

2011-2015

Boritz, J.E., L. Hayes and J. Lim, "On IT weaknesses in auditor's internal control reports" Proceedings of the 18th Americas Conference on Information Systems (AMCIS) Seattle, Washington August 9-11, 2012.

2006-2010

J. Efrim Boritz, W.G. No and R.P. Sundarraj. "Do Companies' Online Privacy Policy Disclosures Meet Customers' Needs?" Proceedings of the 2009 World Congress on Privacy, Security, Trust and the Management of e-Business (Congress 2009) held August 25-27, 2009 in Saint John, NB. *Winner of Best Paper Award.*

J. Efrim Boritz, W. G. No and R.P. Sundarraj. "Internet Privacy: Framework, Review and Opportunities for Future Research" Proceedings of the HICSS (Hawaii International Conference on System Sciences), Jan 11-12, 2008.

Lu. F., J. Efrim. Boritz and Dominic Covvey, "Adaptive Fraud Detection Using Benford's Law" in Luc Lamontagne and Mario Marchand (eds.) Advances in Artificial Intelligence: Proceedings of the 19th Conference of the Canadian Society for Computational Studies of Intelligence, Canadian AI 2006, Quebec City, Canada, June 2006, Springer 2006, pp. 347-358.

2001-2005

Lu. F. and J.E. Boritz, "Detecting Fraud in Health Insurance Data: Learning to Model Incomplete Benford's Law Distributions" in J. Gama et al. (eds.) Machine Learning: Proceedings of the 16th European Conference on Machine Learning, Porto Portugal, October 2005, Springer 2005, pp. 633-630.

Datardina, M. and J.E. Boritz, "Bubbles Burst: A Review of Investment Bubbles Throughout History" Proceedings of the ASAC Annual Conference, June 2003. Received Honourable Mention.

1996-2000

"SysTrust: Assurance on System Reliability" in *The E-Commerce Revolution: New roles for Accountants and Financial Managers* (Daniel Zeghal, ed.) Proceedings of a Conference at the University of Ottawa, Annual Conference, October 18, 2000, pp. 5-9.

Argenti, M. and J.E. Boritz, "Ten Golden Rules for a Successful Business to Consumer E-Commerce Site" *Proceedings of the 1st World Congress on the Management of Electronic Commerce*, McMaster University, Jan 19-21, 2000.

1991-1995

Boritz, J.E., "Comments for Workshop on Measurement" *Proceedings of Workshop on Measurement Research in Financial Accounting*, Sponsored by Ernst & Young Foundation and School of Accountancy, University of Waterloo, September 30-October 1, 1993, pp. 35-39.

Boritz, J.E., D. Kennedy and A. Albuquerque, "Predicting Corporate Failure with Neural Networks" (Abstract), AAA Annual Conference, San Francisco, August 9-11, 1993.

Boritz, J.E., D. Kennedy and A. Albuquerque, "Predicting Corporate Failure with Neural Networks" (Abstract), CAAA Annual Conference, Ottawa, June 10-12, 1993.

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Boritz, J.E., "The Use of Artificial Intelligence in Auditing" *Proceedings of the XIV World Congress of Accountants*, October 11-14, 1992.

Boritz, J.E., "Discussant's Comments on "The Effect of Prior Audit Adjustments & Current Risk Factors on Auditor Evidential Planning Decisions by Bedard and Wright" *Proceedings of University of Illinois 10th Auditing Research Symposium*, Montvale, NJ, October 1-2, 1992.

Boritz, J.E., "Applying Self-Directed Learning Contracts to an Advanced Auditing Course" *Proceedings of the Instructional Show & Tell for Ontario Universities and Colleges*, University of Guelph, May 25-26, 1992.

Boritz, J.E., "Risk Assessment Do's and Don'ts" *Proceedings of the Sixth Canadian Conference on Auditing and Computer Technology*, Toronto, March 30-31, 1992.

1986-1990

Boritz, J.E., "Education 2000: Discussant's Comments on a Presentation by Robert Elliott" invited paper, *Proceedings of the 1990 Canadian Academic Accounting Association Annual Conference*, Victoria, B.C., June 2, 1990.

Boritz, J.E., "A Framework for Internal Audit Risk Management" *Proceedings of the 1987 Risk Analysis Symposium*, University of Nebraska at Omaha, November 4-5, 1987, pp. 51-93.

Boritz, J.E. and R. Kielstra, "A Prototype Expert System for Assessing Inherent Risk" *Proceedings of the 1987 Risk Symposium*, University of Nebraska at Omaha, November 4-5, 1987, pp. 161-208.

Pre-1986

Boritz, J.E., "Documentation of Large Complex Systems" *Proceedings of the CICA Symposium on Computers and Auditing*, Toronto, November 15-18, 1981, 82 pages.

Boritz, J.E. and J.A.B. Callum, "The Application of Auditing Standards to Computerized Accounting Systems" Background paper for the Canadian Institute of Chartered Accountants Symposium on Computers and Auditing, Toronto, November 5-8, 1978; published in *CA Magazine*, January 1979, pp. 34-49.

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2011-present

Boritz, J.E., Artificial Intelligence Technologies with Implications for Assurance Services, *ThinkTWENTY20* 16 (Spring) 2023.

2006-2010

Boritz, E. "A Doleful Tale", Management Ethics, Fall 2009

2001-2005

Boritz, J.E., E. O'Donnell and T. Read, "Aligning Investments in IT with Business Strategy: What CFOs Need to Consider" CICA ITAC White Paper, 2005, available on CICA website at http://www.cica.ca/multimedia/Download_Library/Research_Guidance/IT_Advisory_Committee/English/IT_Issues_for_CFOs.pdf

1996-2000

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1991-1995

Boritz, J.E., "Whistleblowing Revisited" *CA Magazine*, September 1995, pp. 48-49, 52.

Boritz, J.E., "Whistleblowing" *CA Magazine*, September 1994, pp. 57-58.

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1986-1990

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Honourable Mention by Walter J. Macdonald Memorial Award Panel for Best Article in CA Magazine 1989/90.

Boritz, J.E., "Bye, Bye Brazil" *CA Magazine*, November 1989, pp. 36-43.

Boritz, J.E., "The Race to Harness Brainpower" *CA Magazine*, August 1988, pp. 52-59.

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Boritz, J.E. and E.R. Kralits, “Reporting on Condition: Auditing the Going Concern Assumption” *CA Magazine*, March 1987, pp. 67-70.

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Boritz, J.E. and D.A. Brown, “The Expert-Ease of Expert Systems” *CA Magazine*, August 1986, pp. 50-57.

Pre-1986

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Boritz, J.E. and J.A.B. Callum, “EDP systems need GAAS” *CA Magazine*, January 1979, pp. 34-49.

Boritz, J.E., “Uses of Computer-Assisted Audit Techniques” *CA Magazine*, January 1978, pp. 74-76.

Other Profession-Oriented Publications

2021-present

AICPA, Trust/Data Integrity Task Force, *Guide: SOC2 Reporting on an Examination of Controls at a Service Organization Relevant to Security, Availability, Processing Integrity, Confidentiality or Privacy* (Fall, 2022). Member of working group.

2016-2020

AICPA, Trust/Data Integrity Task Force, *Guide: Reporting on Data Integrity*. Member of working group. 2020

Boritz, J.E. and Malik Datardina. *A Framework for Information Integrity Controls and Assurance*, CPA Canada, 2019.

AICPA, Trust/Data Integrity Task Force, *Guide: SOC2 Reporting on an Examination of Controls at a Service Organization Relevant to Security, Availability, Processing Integrity, Confidentiality or Privacy* (January 1, 2018). Member of working group.

AICPA, Trust/Data Integrity Task Force, *Guide - Reporting on an Entity’s Cybersecurity Risk Management Program* (2017). Member of working group.

AICPA, Data Analytics Task Force, *Guide to Audit Data Analytics* (2017). Member of working group.

AICPA, Trust/Data Integrity Task Force, *Reporting on Cybersecurity Risk Management* (2016) <http://www.aicpa.org/Press/PressReleases/2016/Pages/AICPA-Proposes-Criteria-for-Cybersecurity-Risk-Management.aspx>. Member of working group.

2011-2015

AICPA, Trust/Data Integrity Task Force, *Guide: Reporting on Controls at a Service Organization (SOC2)* (2015). Member of working group.

AICPA, Trust/Data Integrity Task Force, *Trust Services Principles and Criteria*, 2013. Member of working group.

AICPA, Trust/Data Integrity Task Force, *Reporting on Controls at a Service Organization*, March 1, 2012 Member of working group.

AICPA, Trust/Data Integrity Task Force, *Reporting on Controls at a Service Organization*, May 1, 2011. Member of working group.

2006-2010

AICPA, Trust/Data Integrity Task Force, *Trust Services Principles, Criteria, and Illustrations*, 2009. Member of working group.

Boritz, J.E. and M. Datarina, *Continuous Monitoring and Assurance: CAATs for the 21st Century*, Toronto: CaseWare IDEA Inc. 2009.

Boritz, J.E. and M. Datarina, *Workbook for IDEA version 7*, Toronto: CaseWare IDEA Inc. 2007.

2001-2005

Boritz, J.E. and L. A. Robinson, “Atlas Cold Storage” Case, Centre for Accounting Ethics, University of Waterloo, 2004.

Boritz, J.E. and L. A. Robinson, “Hollinger International Inc” Case, Centre for Accounting Ethics, University of Waterloo, 2004.

Boritz, J.E. and D. Cockburn, “Livent and the Auditors” Case, Centre for Accounting Ethics, University of Waterloo, 2001. Adapted by TVO for its 2005-2008 curriculum.

Boritz, J.E. and D. Cockburn, “YBM and the Board” Case, Centre for Accounting Ethics, University of Waterloo, 2001.

Boritz, J.E. and D. Cockburn, “Phillip Services” Case, Centre for Accounting Ethics, University of Waterloo, 2001.

1996-2000

“IT in the Accounting Curriculum: Part II” IFAC *Education Network*, Spring 1998, pp. 5-6.

“IT in the Accounting Curriculum: Part I” IFAC *Education Network*, October 1997, pp. 1-2.

Letter to the Editor, *CA Magazine*, March 1996, p. 5.

1991-1995

Research Report on Audit Judgment 1995

Member of Study Group of the Canadian Institute of Chartered Accountants

Boritz, J.E., “Applying Self-Directed Learning Contracts to an Advanced Auditing Course” *Accounting News from Wiley*, 1992. Vol. 1 No. 2.

1986-1990

Proceedings of Education Symposium 1990

Member of Symposium Task Force of the Canadian Institute of Chartered Accountants

Report of the Information Technology Task Force 1990

Member of Information Technology Task Force of the Canadian Institute of Chartered Accountants

Technical Reports

Boritz, J.E. and A.K.P. Wensley, “Canadian Audit Planning Expert System (CAPEX) -- version 1.0” September, 1989, 282 pages.

Boritz, J.E., “CAPS: The Comprehensive Audit Planning System: A Micro-Computer-Based Decision Support System for Internal Audit Planning” *Centre for Accounting Research and Education*, University of Waterloo, Technical Report #1, March 1984, 65 pages.

Software DevelopmentAuditMASTERPLAN - A Decision Support System for Internal Auditors

(developed under sponsorship of the Institute of Internal Auditors, Altamonte Springs, Florida)

The conceptual underpinning for this system was developed under a research grant from the Institute of Internal Auditors Research Foundation which led to the publication of the research monograph entitled: *Planning for the Internal Audit Function* in 1983. Subsequently, a prototype micro-computer based system was developed, leading ultimately to a commercial package released in 1987. It is the best known planning system for internal audit departments, and is used by internal audit organizations throughout the world.

Some aspects of the theory underlying the system are described in Boritz, J.E. and D.S. Broca, “Scheduling Internal Audit Activities”, *Auditing: A Journal of Practice & Theory*, Fall 1986, pp. 1-19. Some operational and implementation aspects of the system are described in Chapter 12 of

G. Courtemanche's book *Audit Management and Supervision*, New York: John Wiley, 1989, pp. 232-274.

CAPEX - Canadian Audit Planning Expert System

(developed under sponsorship of Peat Marwick, Canada and the Government of Ontario under its University Research Incentives Funding program)

This is a research prototype of an audit planning expert system (for planning substantive tests of financial items at the assertion level) implemented on a Unix-based DEC workstation using Prolog, X-windows, and C.

The theory underlying the system is described in Boritz, J.E. and A.K.P. Wensley, "An Expert Systems Approach to Substantive Audit Planning", *Expert Systems with Applications*, Vol. 2, p. 27-49, 1991 and Boritz, J.E. and A.K.P. Wensley, "Structuring the Assessment of Audit Evidence - An Expert Systems Approach", *Auditing: A Journal of Practice & Theory*, Supplement 1990, pp. 49-87.

System validation is described in Boritz, J.E. and A.K.P. Wensley, "Evaluating Expert Systems with Complex Outputs: The Case of Audit Planning", *Auditing: A Journal of Practice & Theory*, Fall 1992, pp. 14-29.

Rule Based System for Inherent Risk Assessment

This is a research prototype of an inherent risk assessment system implemented on a DOS-based IBM compatible system using the VP-Expert programming shell. The system is described in Boritz, J.E., A. Albuquerque and R.G. Kielstra, "A Prototype Expert System for the Assessment of Inherent Risk and Prior Probability of Error", Chapter 5 in H.M. Armitage and J.E. Boritz (eds.), *Decision Support and Expert Systems for Management Accountants*, Society of Management Accountants of Canada, 1991.

Risk Alert (Going Concern Expert System)

Developed under sponsorship of the Canadian Institute of Chartered Accountants and the Government of Ontario under its University Research Incentives Funding program. Elements of the approach are discussed in Boritz, J.E., *The Going Concern Assumption*, Research Report, Toronto: Canadian Institute of Chartered Accountants, 1991.

Works in Progress and Working Papers

Under Review at Journal

1. Novices' Knowledge and Skill Requirements for Audits of Fair Values. With Lev Timoshenko, University of Calgary, Under review at AP.
2. Neuro-Cognitive Measures of Professional Skepticism With Katharine Elizabeth Patterson, University of Waterloo, Kristian Rotaru, Monash University, Carla Wilkin, Monash University. Manuscript August. 2018. Presented at the Southern Ontario Behavioural Decision Research Conference May 3, 2019; EAA Annual Conference May 29-31, 2019 in Paphos, Cyprus. Being revised for resubmission.
3. Business Model Descriptions, with Louise Hayes and Giselle Durand. Presented at the AAA Annual Conference, August 2016; International Symposium on Accounting Information Systems in Valencia, Spain, May 8-9, 2017; AAA Mid-Year Meeting, Orlando, January 24-25, 2020. Being revised for resubmission.
4. How Are FV Impairments Audited? A Study of Auditors and Valuation Specialists with Lev Timoshenko, University of Calgary. Being revised for resubmission.
5. How Reliable are the Hurtt Professional Skepticism Scale and Rotter Interpersonal Trust Scale for Audit Experimental Research? With Katharine Elizabeth Patterson, University of Waterloo, Kristian Rotaru, Monash University, Carla Wilkin, Monash University. Manuscript August. 2017. Presented at the AAA Auditing Section mid-year meeting, Portland, OR Jan 12-13, 2018; EAA Annual Conference, Milan, May 31-June 1, 2018; CAAA Annual Conference Calgary, June 14-17; AAA Annual Conference August 5-8, 2018. Being revised for resubmission.
6. Neuro-Physiological Measures of Professional Skepticism. With Katharine Elizabeth Patterson, University of Waterloo, Kristian Rotaru, Monash University, Carla Wilkin, Monash University. Manuscript October. 2018. Accepted for presentation at the AAA Conference in San Francisco, August 2019. Under Being revised for resubmission.
7. Do Differences in CFO Background Matter to Financial Statement Quality? An Application of Machine Learning and Textual Analytics, with Louise Hayes University of Guelph, January 2017. EAA Annual Conference, Milan, May 31-June 1, 2018. Being revised for submission.

Conference Presentations in Preparation for Journal Submission

8. Cataloguing the Market for Assurance Services with Tim Bauer, Alec Cram, Krista Fiolleau, Bradley Pomeroy, Adam Vitalis, Pei Wang. Accepted for presentation at ISAR, June 1-2 2022. Under Review at AJPT.
9. Internal Audit Competencies with Adam Vitalis and Laura Simeoni. Presented at the Internal Audit Conference. Accepted for presentation at the CAAA annual conference, June 2022. Under Review at IJA.

Other Works in Progress

10. Cataloguing Assurance Related Technologies and Tools Tim Bauer, Krista Fiolleau, Bradley Pomeroy, Adam Vitalis. Submitted to AAA mid-year meeting of AIS/SET sections.
11. Developing New Assurance Services with Tim Bauer, Alec Cram, Krista Fiolleau, Bradley Pomeroy, Adam Vitalis. Being prepared for conference submission.
12. Audit Analytics and Anomalies with Adam Vitalis and Gregory Shields. Data being gathered.

Inactive

1. Integrated Reporting and its Antecedents: An Agenda for Research, with Linda Whittaker. Manuscript, September 2014.
2. Voluntary Assurance on Interim Financial Statements and Earnings Quality, with Sati Bandyopadhyay. Work in progress. Accepted for presentation at the CAAA annual meeting May 29-June 1, 2008 and AAA annual meeting August 2008. Presented at the CAAA annual conference in Edmonton, June 2014. Revise and resubmit from *CAR*.
3. The Effect of Alternative Business Model Representation Techniques on Business and Audit Risk Assessment, with Kun Huo. Presented at CAAA Annual Conference in Montreal, June 2013 and the AAA Annual Conference, August 2014.
4. Who are the reporting issuers in default in Canada? With Nadia Small (ESG-UQAM) and Real Labelle (HEC).
5. Privacy in shared screen/tabletop displays in public environments. with Mark Hancock and Arezoo Iranejad. Presented at the AAA annual conference in Atlanta in August 2014.
6. Does the Type of Business Process Representation Affect Auditors' Ability to Assess Control Risk? with Faye Borthick, Georgia State and Adam Presslee, University of Waterloo. Manuscript 2011. Roundtable Discussion AAA Auditing meeting Savannah, GA 2012. Presented at the CAAA Annual Conference in Charlottetown, PEI, 2012; AAA Annual Meeting, Washington, 2012.
7. Corporate Reporting Awards and Financial Reporting Quality, with Tim Bauer, University of Illinois at Urbana-Champaign, under funding by CFERF (Canadian Financial Executives Research Foundation). Manuscript December 2009. Presented at 2010 European Accounting Conference, Istanbul; Annual CAAA Conference, 2011; Annual AAA Conference, 2011.
8. The Effect of Involvement and Privacy Policy Disclosure on Individuals' Privacy Behaviour, with Won G. No and R. P. Sundarraj. Manuscript 2007. Presented at the AAA Mid-Year Meeting of the IS Section, January 2008.
9. Privacy Policy Disclosures of Companies: An Exploratory Study of Country Level and Industry Level Differences, with Won G. No and R. P. Sundarraj. Manuscript 2007.

- Presented at the AAA Mid-Year Meeting of the IS Section, January 2008. Nominated for best paper award.
10. IT Control Weaknesses, IT Governance and Firm Performance with Jee-Hae Lim, Manuscript 2007. Presented at the AAA Mid-Year Meeting of the IS Section, Jan 11-12, 2008. Winner of Best Paper award; CAAA annual meeting May 29-June 1, 2008.
 11. The Implications of Audits of Internal Control and Management Compensation for Management's Choice of the Control Quality, with Ping Zhang. Manuscript, April 2008.
 12. Assurance at the Data Level, with Eric Cohen of PWC, Manuscript, December 2004.
 13. Infrastructure Requirements for Assurance on XBRL Documents, with Won G. No, presented at Kansas XBRL Conference October 2003.
 14. Empirical Test of The Implications of Audits of Internal Control and Management Compensation for Management's Choice of Internal Control Quality, with Jee-Hae Lim and Ping Zhang.
 15. Adaptive Business Failure Prediction System, with Duane Kennedy and Fletcher Lu, Manuscript, December 2004
 16. Explaining Quarterly Reporting Choices by Canadian Companies, with Guoping Liu, December 2005. Accepted for forum presentation at AAA.
 17. Timeliness of Quarterly Reporting by Canadian Companies, with Guoping Liu, December 2005.
 18. Auditors' Expertise in Assessing the Risk of Management Fraud, with William Wright, Manuscript, December 2004.
 19. Predicting Going Concern Risks in Canada, with Jerry Sun, School of Accountancy Working Paper, January 2004. Presented at ASAC conference June 2004.
 20. The Use of Educational Technologies in Accounting Education in Canada, with David Bateman, St. Mary's University, Manuscript, 1999.
 21. The Use of Educational Technologies in the Accounting Profession in Canada, Manuscript 1999.
 22. Auditors' Judgments in Assessing the Risk of Management Fraud, Manuscript, December 1998. Presented at Auditing Section of AAA mid-year meetings in Atlanta.
 23. Auditors' Information Search Behaviour in Assessing the Risk of Management Fraud, Manuscript, December 1997.
 24. Behavioral Game Theory: Fertile Ground for Accounting Research, with Susan McCracken, Manuscript, April 1997.
 25. The Waterloo Returns Market and the Student, with Sati Bandyopadhyay, Manuscript, December 1997.

26. Word Usage Frequencies by External Auditors with Different Amounts and Types of Expertise: The Case of What They Say vs. What They Do, Manuscript, December 1996.

Invited Addresses, Papers Presented, Conference and Seminar Participation

2021-

Cataloguing the Market for Assurance Services, European Annual Congress, Helsinki, Finland, May 24-26, 2023

Cataloguing Assurance Technologies and Tools, AAA Mid-Year Meeting, Las Vegas, January 28, 2023

Cataloguing the Market for Assurance Services presented at the International Symposium for Auditing Research, ISAR, June 1-2 2022.

How Do Auditors Assess Key Inputs in a Discounted Cash Flow Model? J. Efrim Boritz, University of Waterloo; Lev Timoshenko, University of Calgary, AAA Annual Conference, August 3, 2021

2016-2020

Invited presentation. Classifying Restatements: An Application of Machine Learning and Textual Analysis. (Working paper co-authored with Louise Hayes, University of Guelph). St. Mary's University, November 19, 2020.

Criteria for Reporting on Data/Information Integrity. Annual Audit, Risk and Governance Conference, AssoCham India, October 27, 2020.

Criteria for Reporting on Data/Information Integrity. IIA National Conference, Toronto, September 15-18, 2019.

Cybersecurity Risk Management Reporting and Assurance. Property and Casualty Insurance Risk Officers Forum, September 4, 2019.

Neuro-Physiological Measures of Professional Skepticism. With Katharine Elizabeth Patterson, University of Waterloo, Kristian Rotaru, Monash University, Carla Wilkin, Monash University. Manuscript October, 2018. Presented at the AAA Annual Conference in San Francisco, August 10, 2019.

Factors Affecting Individuals' Susceptibility to Cyber Attacks. International Symposium on Accounting Information Systems, Michigan State University, June 27-28, 2019.

Non-GAAP Information: Opportunities for Assurance. Invited Keynote Address: International Symposium on Accounting Information Systems, Michigan State University, June 28, 2019.

SOC for Cyber, Invited Presentation at the ISACA Toronto Annual Summer Conference, June 18, 2019

Criteria for Reporting on Data/Information Integrity. CCITAGS Conference, Toronto, April 3-4, 2019.

Factors Affecting Individuals' Susceptibility to Cyber Attacks. 44 WCARS, Seville, March 21, 2019.

Cybersecurity Risk Management Reporting and Assurance. UWCISA workshop presented at CPA Canada on October 26, 2018.

How Reliable are the Hurtt Professional Skepticism Scale and Rotter Interpersonal Trust Scale for Audit Experimental Research? with Katharine Elizabeth Patterson, University of Waterloo, Kristian Rotaru, Monash University, Carla Wilkin, Monash University. AAA Annual Conference, Washington. August 8. 2018

How Reliable are the Hurtt Professional Skepticism Scale and Rotter Interpersonal Trust Scale for Audit Experimental Research? with Katharine Elizabeth Patterson, University of Waterloo, Kristian Rotaru, Monash University, Carla Wilkin, Monash University. CAAA Annual Conference, Calgary. June 15, 2018

How Reliable are the Hurtt Professional Skepticism Scale and Rotter Interpersonal Trust Scale for Audit Experimental Research? with Katharine Elizabeth Patterson, University of Waterloo, Kristian Rotaru, Monash University, Carla Wilkin, Monash University. EAA Annual Conference in Milan, Italy, June 1, 2018

Invited presentation. How Understandable are SOX 404 Reports? with Louise Hayes and Lev Timoshenko. Monash University, April 13, 2018.

Visiting Scholar, Monash University, April 3- 17, 2018.

Cybersecurity Risk Management Program Examination Reporting and Assurance, CCITAGS Canadian Conference on IT Audit, Governance and Security. March 27-29, 2018, Toronto.

Organizer, UWCISA Tenth Biennial Research Symposium on Information Integrity and Information Systems Assurance, October 19-21, 2017.

Cybersecurity Risk Management Program Examination Engagements. Workshop organized for the AAA annual meeting in San Diego, August 5, 2017

Invited presentation. Are External Auditors Concerned about Cyber Incidents? Evidence from Audit Fees' with He Li and Won No, Rutgers University. Monash University, March 10, 2017.

Visiting Scholar, Monash University, Feb 27- Mar 10, 2017.

Cybersecurity Risk Management Program Examination Engagements. Panel organized at the AAA mid-year meeting of the Auditing section in Orlando, January 14, 2017

Cybersecurity Risk Management Program Examination Engagements. Panel organized at the AAA mid-year meeting of the AIS/SET sections in Orlando, January 20, 2017

Classifying Restatements: An Application of Machine Learning and Textual Analysis, with Louise Hayes, University of Guelph. Presented at the AAA Annual Conference, New York. August 2016. Accepted for presentation at AAA mid-year meeting of the AIS/SET section in Orlando, January 2017.

Are External Auditors Concerned about Cyber Incidents? Evidence from Audit Fees' with He Li and Won No, Rutgers University. Accepted for presentation at AAA mid-year meeting of the Auditing Section and the AAA mid-year meeting of the AIS/SET section in Orlando, January 2017.

Alternative Business Model Representation Techniques: A Research Synthesis. Co-authored with Giselle White. Presented at the AAA Annual Conference, New York, August 2016.

How Readable are SOX 404 Reports? Co-authored with Louise Hayes and Lev Timoshenko. August 2015. Presented at the CAAA Annual Conference, St. John's Newfoundland, June 2016; AAA Annual Conference, New York, August 2016.

How Understandable are SOX 404 Reports? Co-authored with Louise Hayes and Lev Timoshenko. Presented at the AAA Annual Conference, in Chicago, August 2015; World Banking and Finance Conference, Hanoi December 17-18, 2015; mid-year meeting of AAA SET section in Houston Jan 23, 2016.

2011-2015

Invited Workshop Presentation, The Impact of Executive Team Competencies on XBRL Adoption, with Jap Efendi, University of Sydney and Jee-Hae Lim, University of Waterloo. Queensland University of Technology, November 27, 2015.

Visiting Scholar, Queensland University of Technology, Brisbane, Australia. November.18-December 2 2015.

Organizer, UWCISA Ninth Biennial Research Symposium on Information Integrity and Information Systems Assurance, October, 2015.

Invited Organizer and Panelist on Professional Judgment with Krista Fiolleau and Brad Pomeroy, 2015 CPA Canada Conference. September 29, 2015.

Invited Presentation, Auditors' and Specialists' Views about the Use of Specialists during an Audit, with Natalia Kochetova-Kozloski, Linda Robinson and Chris Wong. ISAR annual conference in Boston, May 18-20, 2015.

Invited Panelist on Use of Specialists in the Audit, PCAOB Standards Advisory Group meeting, Washington, May 17, 2015.

Invited Panelist on Data Visualization, 2015 Conference on IT Audit, Governance and Security. March 27, 2015.

Invited Panelist on Using Data Mining in Procurement Audits, 2015 Conference on IT Audit, Governance and Security, March 25—26, 2015..

Invited Presentation, Information Integrity: Principles, Criteria, Risks, Controls and Assurance, ISACA Waterloo Region, March 12, 2015.

Auditors' and Specialists' Views about the Use of Specialists during an Audit, with Natalia Kochetova-Kozloski, Linda Robinson and Chris Wong. CAAA annual conference in Edmonton, May 31, 2014; EAA annual conference in Glasgow, April 30, 2015.

Invited Panelist on The Future of Financial Reporting, CPA National Conference, Toronto, September 22, 2014.

The Informativeness of SOX 404 Reports. With Louise Hayes and Lev Timoshenko. Presented at the AAA Annual Conference, August 5, 2014.

Voluntary Quarterly Reviews:, with Sati Bandyopadhyay. CAAA annual conference in Edmonton, May 31, 2014

Information Integrity Controls. With Malik Datardina. Presented at WCARS Rutgers University Nov 9, 2013.

Organizer, UWCISA Eighth Biennial Research Symposium on Information Integrity and Information Systems Assurance, October 3-5, 2013.

IT in Accounting Education. With Greg Stoner of Glasgow University, Scotland. Presented at the AAA annual conference in Anaheim in August 3-7, 2013.

XBRL vs. Compustat, Google and Yahoo! (with Won G. No). Presented at the AAA Annual Conference in Anaheim, California August 3-7, 2013. Presented at Kansas University XBRL Conference. October 2013. Presented at the 26th XBRL International Conference in Dublin, Ireland. April 15-18, 2013. Presented at the AAA IS section mid-year conference in Ft. Lauderdale, Jan 10-12, 2013.

Executive Team Information System and Financial Reporting Competencies and Voluntary Adoption of XBRL Reporting (with Jap Efendi and Jee-Hae Lim). Presented at the AAA IS section mid-year conference in Ft. Lauderdale, Jan 10-12, 2013. Presented at CAAA Annual conference Montreal May 31, 2013.

Executive Team Information System and Financial Reporting Competencies and Voluntary Adoption of XBRL Reporting (with Jap Efendi and Jee-Hae Lim). Presented at the XBRL 25 International Conference in Yokohama, Japan Nov 6-8, 2012.

XBRL and Financial Reporting. Invited presentation at Konkuk University, Seoul, Korea. November 11, 2012.

XBRL vs. Compustat, Google and Yahoo! (with Won G. No).

Presented at XBRL 25 International Conference in Yokohama, Japan Nov 6-8, 2012.

The Effect of Business Process Representation Type on Auditors' Assessment of Business and Control Risks, with Faye Borthick, Georgia State and Adam Presslee, University of Waterloo. Manuscript 2011. Accepted for Roundtable Discussion AAA Auditing meeting Savannah, GA Jan 12-14, 2012; CAAA Annual Conference in Charlottetown, PEI, May 31-June 3, 2012; AAA Annual Meeting in Washington Aug 4-8, 2012.

Firm-Specific Characteristics of the SEC's XBRL Voluntary Filing Program Participants, with Lev Timoshenko, Manuscript 2011. AAA IS meeting Jan 5-7, 2012; 24th WCARS in Malaya, Turkey May 3-4, 2012.

What did we learn from the SEC's Voluntary XBRL Filing Program? With Lev Timoshenko, Manuscript 2011. AAA IS meeting, Scottsdale, AZ Jan 5-7, 2012; 24th International XBRL Conference, Abu Dhabi, March 20-22, 2012.

Invited Panelist, The AICPA's Exposure Draft on Principles and Criteria for Assurance on XBRL, 24th International XBRL Conference, Abu Dhabi, March 20-22, 2012.

The Effect of Business Process Representation Type on Students' Assessment of Business and Control Risks, Invited Presentation, College of Management Studies, Rishon LeTzion, Israel, November 17, 2011.

Assurance Track Co-Chair, 23rd. XBRL International Conference, Montreal, September 25-27, 2011.

Invited Panelist, The AICPA's Exposure Draft on Principles and Criteria for Assurance on XBRL, 23rd International XBRL Conference, Montreal, September 25-27, 2011.

Organizer, UWCISA Seventh Biennial Research Symposium on Information Integrity and Information Systems Assurance, October 20-22, 2011.

Corporate Reporting Awards and Earnings Quality, AAA annual conference in Denver, August, 2011.

Information Integrity, 8th ICESAL Conference, Thassos Island July 11, 2011.

Corporate Reporting Awards and Earnings Quality, CAAA annual conference in Toronto, May, 2011.

The Effect of Business Process Representation Type on Students' Assessment of Business and Control Risks, Mid-Year meeting of AAA IS Section, Atlanta, Jan 2011.

2006 – 2010

Invited Panelist, XBRL International Conference, Beijing October 18-20, 2010.

What do IT weaknesses tell us about financial reporting systems. with Louise Hayes and Jee-Hae Lim. CAAA annual conference in Vancouver, May 31, 2010.

Corporate Reporting Awards and Earnings Quality
Massey University at Albany, New Zealand March 18, 2010.

Corporate Reporting Awards and Earnings Quality
Victoria University of Wellington, New Zealand March 9, 2010.

Organizer, UWCISA Sixth Biennial Research Symposium on Information System Assurance,
October 1-3, 2009.

Research Opportunities for XBRL, AAA annual conference in New York, August 5, 2009.

Information Integrity and the Balanced Scorecard. with Leslie Berger. AAA annual
conference in New York, August 5, 2009.

Computer-Assisted Auditing for XBRL Documents, 19th XBRL International conference in
Paris, June 22-25, 2009.

Information Integrity and the Balanced Scorecard. With Leslie Berger. CAAA annual
conference in Montreal, June 6, 2009.

Discussion of “Auditor Acceptance of Computer-Assisted Audit Techniques” by Janvrin,
Lowe and Bierstaker, AAA Auditing section mid-year meetings in St. Petersburg, FL, Jan
17, 2009.

Planning Fraud Detection Procedures: Forensic Accountants vs. Auditors, with Natalia
Kochetova and Linda Robinson. AAA Auditing section mid-year meeting Jan 16, 2009.

Information Integrity and the Balanced Scorecard. With Leslie Berger. AAA IS section mid-
year meetings in Charleston, S.C. Jan 9, 2009.

Computer-Assisted Auditing for XBRL Documents, With Won G. No. AAA SET section
mid-year meetings in Charleston, S.C., Jan 10, 2009.

XBRL – Unanswered Questions. Invited Presentation at CAAA-SAP-Brock Conference on
XBRL, IFRS and Governance, Brock University, St. Catherines, September 26, 2008.

Organized and presented half-day workshop for practitioners on “Computer-Assisted
Auditing for XBRL Documents,” with Won G. No, Toronto, August 28, 2008.

Do Companies’ Online Privacy Policy Disclosure Meet Customers’ Needs?
Won G. No and R. P. Sundarraj. AAA annual meeting, Anaheim, August 3-6, 2008.

Approaches to Documenting Business Models, with Paulo Alencar and Carla Carnaghan,
AAA annual meeting, Anaheim, August 3-6, 2008.

Organizer, Jamal/Salterio Debate on the “Role of Auditing in Protecting Capital Markets
Against Fraudulent Financial Reporting,” CAAA annual meeting, Winnipeg, May 29-June 1,
2008.

IT Control Weaknesses, IT Governance and Firm Performance with Jee-Hae Lim, CAAA
annual meeting, Winnipeg, May 29-June 1, 2008.

Quarterly Reporting: Voluntary vs. Mandatory Assurance, with Sati Bandyopadhyay and Guoping Liu. CAAA annual meeting, Winnipeg, May 29-June 1, 2008.

Planning Fraud Detection Procedures: Forensic Accountants vs. Auditors, with Natalia Kochetova and Linda Robinson. Manuscript, January 2008. CAAA annual meeting, Winnipeg, May 29-June 1, 2008.

Approaches to Documenting Business Models, with Paulo Alencar and Carla Carnaghan, CAAA annual meeting, Winnipeg, May 29-June 1, 2008.

Approaches to Documenting Business Models, with Paulo Alencar and Carla Carnaghan, ISAR Conference, Winnipeg, May 30-31, 2008.

Planning Fraud Detection Procedures: Forensic Accountants vs. Auditors, with Natalia Kochetova and Linda Robinson. ISAR Conference, May 30-31, 2008.

Planning Fraud Detection Procedures: Forensic Accountants vs. Auditors, with Natalia Kochetova and Linda Robinson. CAAA annual meeting May 29-June 1, 2008.

Approaches to Documenting Business Models, with Paulo Alencar and Carla Carnaghan, Manuscript, January 2008. ASAC annual conference May 24-27, 2008.

Boritz, J. E. and W. G. No, "The SEC's XBRL Voluntary Filing Program on EDGAR: A Case for Quality Assurance," IASCF's IFRS Conference, April 24, 2008.

Auditing an XBRL Instance Document: The Case of United Technologies, with Won G. No. Manuscript 2007. AAA Mid-Year Meeting of the AI/ET Section, Jan 11-12, 2008.

IT Control Weaknesses, IT Governance and Firm Performance with Jee-Hae Lim, Manuscript 2007. AAA Mid-Year Meeting of the IS Section, Jan 11-12, 2008. Winner of Best Paper award.

The Effect of Involvement and Privacy Policy Disclosure on Individuals' Privacy Behaviour with Won Gyun No and R. P. Sundarraj. AAA Mid-Year Meeting of the IS Section, Jan 11-12, 2008.

Privacy Policy Disclosures of Companies: An Exploratory Study of Country Level and Industry Level Differences with Won Gyun No and R. P. Sundarraj. AAA Mid-Year Meeting of the IS Section, Jan 11-12, 2008. Nominated for Best Paper Award.

"Internet Privacy: Framework, Review and Opportunities for Future Research," Presented at the HICSS Conference, Jan 7-10, 2008.

Impact of Top Management's IT knowledge and IT Governance Mechanisms on Financial Performance with Jee-Hae Lim, Manuscript 2007. Presented at the Annual Conference of the ICIS, Dec 8-12, 2007. Nominated for Best Paper Award.

Auditing an XBRL Instance Document: The Case of United Technologies. Invited Seminar presentation, Rutgers University, Newark, NJ, November, 30, 2007.

Organizer, UWCISA Fifth Biennial Research Symposium on Information System Assurance, October 10-12, 2007.

Quarterly Reporting: Voluntary vs. Mandatory Assurance, with Sati Bandyopadhyay. ISBIS-2007: INTERNATIONAL SYMPOSIUM ON BUSINESS AND INDUSTRIAL STATISTICS-2007, University of Azores, Sao Miguel Island, Ponta Delgada, Azores, Portugal, 18-20 August 2007

The Effect of Involvement and Privacy Policy Disclosure on Individuals' Privacy Behaviour with Won Gyun No and R. P. Sundarraj, CAAA Annual Conference, Halifax, NS May 31-June 3, 2007.

Auditing an XBRL Instance Document, International Conference on XBRL Taxonomies and Assurance, University of Kansas, May 11-12, 2007.

Invited Keynote Speaker, CGA Conference at University of Manitoba, May 4-6, 2007.

Invited speaker, "XBRL and the Future of Reporting on the Web," Brock University, September 29, 2006.

"The value of internal control reporting" with Ping Zhang. Accepted for presentation AAA Annual Conference, August, 2006.

"The value of internal control reporting" with Ping Zhang. CAAA Annual Conference, Niagara Falls, June 7, 2006.

Organizer, Panel on Impact of IFRS on Canadian Academic Community, CAAA Annual Conference, Niagara Falls, June 7, 2006.

Invited speaker, XBRL and the Future of Reporting on the Web, Canadian Conference on IT Governance, Security and Auditing, Toronto, March 28, 2006.

Organizer, Policy Forum on "Maintaining Quality Capital Markets Through Quality Information," Calgary, January 8, 2006.

2001 - 2005

Invited closing speaker, City of Toronto Seminar on Managing Information Security, Toronto, December 13, 2005.

"A Secure IT Infrastructure for E-Business," CIPS monthly meeting, Toronto, December 12, 2005.

Organizer, Policy Forum on "Maintaining Quality Capital Markets Through Quality Information," Toronto, December 8, 2005.

"Continuous Auditing in the Shadow of SOX," Continuous Auditing in the Shadows of SOX, 10th Conference on Continuous Auditing, Rutgers University, Newark, NJ, November 4-5, 2005.

“A Secure IT Infrastructure for E-Business,” UWCISA Information System Assurance Research Symposium, October 21, 2005.

Organizer, UWCISA Fourth Biennial Research Symposium on Information System Assurance, October 20-22, 2005.

“Aligning Investments in IT with Business Objectives,” Conference on IT Audit, Governance and Security, Life Insurance Institute of Canada Annual Conference, Toronto, June 23, 2005

“Assurance for a Data-Centric World,” 9th Conference on Continuous Auditing, University of Malta, Malta May 13-14, 2005.

“Aligning Investments in IT with Business Objectives,” Conference on IT Audit, Governance and Security, Toronto, April 4, 2005

“Secure IT Infrastructure for E-Commerce, Conference on IT Audit, Governance and Security,” Toronto, April 4, 2005.

“The Continuous, Integrated Audit,” 8th Conference on Continuous Auditing, Rutgers University, Newark, NJ, November 5-6, 2004.

ICAO/UW CAE Workshop on Accounting Ethics, Toronto, October 29, 2004

IT Governance Panel, AAA annual conference, Orlando, FL, August 10, 2004

IT Governance Panel, AMCIS annual conference, New York, NY, August 7, 2004.

“Predicting Going Concern Risks in Canada,” ASAC annual conference, Quebec City, June 5-8, 2004.

Hollinger Inc. Case (with Linda Robinson), CAAA annual conference, Vancouver, B.C. May 30, 2004.

“dataTrust”, CAAA annual conference, Vancouver, B.C., May 29, 2004.

“Security Infrastructure Requirements for XBRL/XML Documents on the Internet,” University of Maryland, May 28, 2004.

“Core Concepts of Information Integrity,” ECAIS annual conference. Prague, March 30, 2004.

“dataTrust”, 7th International Conference on Continuous Auditing, Monaco, March 26, 2004.

“Core Concepts of Information Integrity,” UWCISA Symposium on IS Research, November 1, 2003.

Organizer, UWCISA Third Biennial Research Symposium on Information System Assurance, October 30-November 1, 2003.

“Infrastructure Requirements for Assurance on XBRL Documents,” with Won G. No, International Conference on XBRL, University of Kansas, October 20-21, 2003.

“The Bubble Bursts: A Review of Investment Bubbles Throughout History,” with M. Datardina at ASAC Annual Conference, June 2003.

Invited Panelist on Critical Perspectives in Accounting. ASAC Annual Conference, June 2003.

Philip Services Case. Ethics Workshop at CAAA Annual Conference, Ottawa, June 2003.

“Governance, Transparency, Integrity: The Role of Information Technology,” 10th Annual AIS Conference, Phoenix, Feb 21, 2003.

“Assurance Reporting for XBRL,” XBRL Conference, Toronto, June 19, 2002

“Assurance Reporting with XBRL,” International Conference on XBRL Taxonomies, University of Kansas, Oct. 13, 2001

Organizer, UWCISA Second Biennial Research Symposium on Information System Assurance, October 4-6, 2001.

1991 - 2000

“How to Perform a SysTrust Engagement”, AICPA/CICA System Assurance Conference, Orlando, Oct 26-27, 2000.

“SysTrust Overview”, University of Ottawa, Annual Conference, October 18, 2000.

“An Electronic Commerce Overview Course”, IBM Cascon Conference, Waterloo, June 29, 2000.

“SysTrust Overview”, AICPA Tech2000 Conference, Atlanta, May 9-10, 2000.

“Ten Golden Rules for a Successful Business to Consumer E-Commerce Site,” McMaster University, Jan 19, 2000.

“SysTrust Principles and Criteria”, KPMG IRM Conference, Toronto, December 2, 1999.

Accounting Education Conference, Simon Fraser University, Vancouver, November 19-20, 1999.

Organizer, UWCISA First Biennial Research Symposium on Information System Assurance, September 30-October 2, 1999.

COBIT 3rd Edition Development Workshop, Information Systems Audit & Control Association, Lisle, IL, November 11-14, 1999.

Assurance on Electronic Commerce: WebTrust and SysTrust, Institute of Chartered Accountants in Iceland, Annual Conference, Reykjavik, Iceland, November 4, 1999.

“SysTrust Principles and Criteria”, The Second Annual AICPA/CICA Conference on Assurance Services, Toronto, July 15-16, 1999.

“Research and Teaching Issues in Assurance Services on Electronic Commerce”, Canadian Academic Accounting Association Annual Conference, Toronto, June 5, 1999.

“The Accounting Curriculum and IT”, Institute of Chartered Accountants of Pakistan, Lahore, May 8, Karachi, May 10, 1999.

“Information Technology in the Accounting Curriculum,” Accounting Education Conference, sponsored by IFAC, ICAA, ASCPA, Sydney, Australia, March 23, 1999.

“Continuous Auditing,” AIS Research Symposium, Scottsdale, February 20, 1999.

“Auditors’ Assessments of Management Fraud Risk: Hypothesis frames, confirmation biases and experience”, Auditing Section Midyear Meeting, Atlanta, January 15, 1999.

AAA/AICPA IT Visioning Conference, Dallas, November 4, 1998.

“Reporting on System Reliability”, AICPA/CICA Conference on Assurance Services, Las Vegas, June 5, 1998.

“Management Fraud”, Ethics Workshop, Canadian Academic Accounting Association Annual Conference, Saskatoon, May 31, 1998.

“Report on a Survey of Canadian Academic Accounting Departments’ Use of the World Wide Web”, Canadian Academic Accounting Association Annual Conference, Saskatoon, May 29, 1998.

“Balancing Research, Teaching and Service”, Doctoral and New Faculty Session, Canadian Academic Accounting Association Annual Conference, Saskatoon, May 28, 1998.

“Information Technology in the Accounting Curriculum,” Accounting Education Conference, sponsored by IFAC, Bahrain, March, 1998.

“Auditor’s Judgment Processes in Assessing the Risk of Management Fraud”, University of Calgary, March 1998.

“Issues Pertaining to CA/CPA Assurance on System Reliability”, Mid-Year Meeting of the Information Systems Section of the American Accounting Association, Scottsdale, Arizona, February 20, 1998.

“Information Technology in the Accounting Curriculum,” World Congress of Accounting Educators sponsored by the IAAER, Paris, France, October 23-25, 1997

“Information Technology in the Accounting Curriculum,” Accounting Education Conference, sponsored by IFAC, Miami, March, 1997.

“Implementation of the Iowa Electronic Market at the University of Waterloo,” (with S. P. Bandyopadhyay) Canadian Academic Accounting Association Annual Conference, Montreal, May 23-25, 1996.

“Information Technology in the Accounting Curriculum,” Canadian Academic Accounting Association Annual Conference, Montreal, June 8-10, 1995.

“Effectiveness of Neural Network Types for Predicting Business Failure,” (with D. Kennedy) Canadian Academic Accounting Association Annual Conference, Montreal, June 8-10, 1995.

Implications of Alternative Litigation Cost Allocation Systems for the Value of Audits to Investors, (with P. Zhang), Canadian Academic Accounting Association Annual Conference, Montreal, June 8-10, 1995.

Discussant's Comments on “Debiasing of Framing Effects in Internal Control Judgments and Testing Decisions of Auditors,” 10th Contemporary Accounting Research Conference, Banff, April 29-May 1, 1995.

Implications of Alternative Litigation Cost Allocation Systems for the Value of Audits to Investors, (with P. Zhang), University of Toronto, November 30, 1994.

Implications of Alternative Litigation Cost Allocation Systems for the Value of Audits to Investors, (with P. Zhang), University of Waterloo, October 24, 1994.

Invited Panelist, “Collaborative/Co-operative Approaches to Auditing Education”, Auditing Education Conference, Oxnard, CA, February 11-12, 1994.

“An Intelligent Decision Support System for the Assessment of the Risk of Business Failure and the Validity of the Going Concern Assumption”, Samson Belair/Deloitte & Touche Seminar, University of Quebec at Montreal, February 11, 1994.

“Predicting Business Failures with Neural Networks”, (with D. Kennedy) Fifth International Conference on Intelligent Systems in Accounting, Finance and Management, Stanford University, November 11-13, 1993.

Invited participant, *Workshop on Measurement Research in Financial Accounting*, Sponsored by Ernst & Young Foundation and School of Accountancy, University of Waterloo, September 30-October 1, 1993.

“Predicting Business Failures with Neural Networks”, (with D. Kennedy) AAA Annual Conference, San Francisco, August 8-11, 1993.

“Predicting Business Failures with Neural Networks”, (with D. Kennedy) CAAA Annual Conference, Ottawa, June 10-12, 1993.

“Internal Control”, Arranged and chaired plenary session on internal control at CAAA Annual Conference, Ottawa, June 12, 1993.

“Predicting Business Failures with Neural Networks”, (with D. Kennedy) Universities of Buffalo and Waterloo Accounting Symposium, Buffalo, May 21-22.

“Predicting Business Failures with Neural Networks”, (with D. Kennedy) TIMS/ORSA Annual Conference, San Francisco, November 1992.

“The Use of Artificial Intelligence in Auditing”, Invited paper, XIV World Congress of Accountants, Washington, D. C., October 11-14, 1992.

“Accounting Education in Canada”, Invited paper, 7th International Conference on Accounting Education, Washington, D. C., October 8-10, 1992.

“Applying Self-Directed Learning Contracts to an Advanced Auditing Course”, Instructional Show & Tell for Ontario Universities and Colleges, University of Guelph, May 25-26, 1992.

“Applying Self-Directed Learning to an Advanced Auditing Course”, Introducing Self-Directed Learning into Traditional Courses, Teaching and Learning Workshop Series, University of Waterloo, May 20, 1992.

“Risk Analysis: Do's and Don'ts”, Canadian Conference on Auditing and Computer Technology, Toronto, March 31, 1992.

“An Intelligent Decision Support System for Evaluating Business Risk and the Going Concern Assumption”, University of Manitoba, March 6, 1992.

Institute/University Accounting Faculty Conference, Institute of Chartered Accountants of Ontario, Toronto, October 29-30, 1991.

“Risk-Based Planning for Internal Audit”, invited paper, Association of University Internal Auditors of Ontario, Waterloo, October 22, 1991.

“Discussant's Comments on “Expert and Novice Problem-Solving Behaviour in Audit Planning”, University of Waterloo/Clarkson Gordon Audit Symposium, Waterloo, Ontario, September 19-21, 1991.

1981 - 1990

“A Framework for Internal Audit Planning and Risk Assessment”, auditMASTERPLAN Independent Users Group, Boston, December 10, 1990.

CICA Education Symposium, Toronto, November 11-13, 1990.

“Approaches to Dealing with Risk and Uncertainty, University of Waterloo Accounting Alumni Professional Development Day, September 28, 1990.

“Validating Expert Systems”, with A. K. P. Wensley, presented at the International Expert Systems Symposium, sponsored by the University of Southern California, September 19-21, 1990.

“Education 2000: Discussant's Comments on a Presentation by Robert Elliott”, invited paper presented at the Canadian Academic Accounting Association Annual Conference, Victoria, B.C., June 2, 1990.

“Risk-Based Planning for Internal Audit”, Institute of Internal Auditors (London, Ont. chapter), May 17, 1990.

Institute/University Accounting Faculty Conference, Institute of Chartered Accountants of Ontario, Toronto, May 16-17, 1990.

“Approaches to Aggregation of Evidence in an Assertion-Based Audit Framework”, University of Toronto, May 4, 1990.

“Approaches to Dealing with Risk and Uncertainty”, Seminar sponsored by McMaster University and the Canadian Institute of Chartered Accountants, April 25, 1990.

“Approaches to Dealing with Risk and Uncertainty”, University of Toronto, March 23, 1990.

“Gearing Up for Desktop Auditing”, Financial Management Institute of Canada, Professional Development Week '89, November 23, 1989.

“A Prototype Expert System for the Assessment of Inherent Risk and Prior Probability of Error”, Research Conference on Controlling & Auditing, Arhus School of Business, Arhus, Denmark, August 28-30, 1989.

“The Story of CIDA, ESAF, and U of W”, Canadian Academic Accounting Association Annual Conference, Quebec City, June 8, 1989.

Invited panelist, First International Symposium on Expert Systems in Business, Finance and Accounting, University of Southern California, Newport Beach, California, September 29-30, 1988.

Invited panelist, “A Framework for Internal Audit Planning and Risk Assessment”, presented at the Price Waterhouse Auditing Symposium, Orlando, Florida, August 12-13, 1988.

“Creative Thinking and Problem Solving in the Accounting Curriculum”, with H.M. Armitage, invited paper presented at the Canadian Academic Accounting Association Annual Conference, Windsor, Ontario, June 1, 1988.

“Structuring the Assessment of Audit Evidence -- An Expert Systems Approach”, with A. K. Wensley, presented at the Audit Judgment Symposium, University of Southern California, February 15-16, 1988.

“Teaching Visual Data Representations to Accounting Students”, with H.M. Armitage, at the conference on Visual Data Representations: Coping with Overload and Improving Our Insight, St. Jerome's College, University of Waterloo, Waterloo, Ontario, November 27, 1987.

“A Framework for Internal Audit Risk Management”, presented at the Symposium on Audit Risk, at the University of Nebraska at Omaha, Omaha, Nebraska, November 4-5, 1987.

“A Prototype Expert System for the Assessment of Inherent Risk and Prior Probability of Error”, with R. G. Kielstra, presented at the Symposium on Audit Risk, at the University of Nebraska at Omaha, Omaha, Nebraska, November 4-5, 1987.

“Structuring the Assessment of Audit Evidence -- An Expert Systems Approach”, Auditing Symposium held at the University of Waterloo, Waterloo, Ontario, November 5-6, 1987.

“Structuring the Assessment of Audit Evidence -- An Expert Systems Approach”, Laval University, Quebec City, Quebec, October 23, 1987.

“Expert Systems in Accounting”, University of Waterloo Accounting Alumni Professional Development Day, October 2, 1987.

“Internal Audit Risk Management: An Automated Approach”, Institute of Internal Auditors (South Carolina Chapter) Columbia, S.C., April 27, 1987.

“Internal Audit Risk Management: An Automated Approach”, 17th Conference on Computer Audit Control and Security, Boston, MA, March 23, 1987.

“Audit Risk Management: An Automated Approach”, Canadian Conference on Auditing and Computer Technology, Toronto, October 6-8, 1986.

“An Experimental Study of the Effects of Elicitation Methods on Review of Preliminary Audit Strategy by External Auditors”, with B.G. Gaber and W. M. Lemon, Contemporary Accounting Research Conference on Economic and Behavioural Implications of Accounting Information and Its Validation, McMaster University, Hamilton, Ontario, August 4-25, 1986.

“auditMASTERPLAN: a Computerized Audit Planning System”, Conference of Casualty Insurance Companies, Internal Auditors Seminar, Chicago, June 5, 1986.

“Artificial Intelligence and Expert Systems”, Canadian Academic Accounting Association Annual Conference, Winnipeg, Manitoba, Plenary Session, May 28, 1986.

“auditMASTERPLAN: A Computerized Audit Planning System”, Automated Audit Symposium and Software Exchange, Atlanta, May 4-6, 1986.

“Audit Planning: The Automated Approach”, The Institute of Internal Auditors, State of the Art Conference, Boston, April 7-9, 1986.

“auditMASTERPLAN: A Computerized Audit Planning System”, The EDP Auditors Association (Toronto Chapter), Toronto, March 13, 1986.

“auditMASTERPLAN: A Computerized Audit Planning System”, The Institute of Internal Auditors, Information Systems Audit and Control Conference, Orlando, February 10-12, 1986.

“An Experimental Study of Review of Preliminary Audit Strategy by External Auditors”, University of Alberta, Edmonton, October 11, 1985.

“Internal Audit Planning and Risk Analysis”, Institute of Internal Auditors, (Montreal Chapter), Montreal, October 29, 1985.

“Professional Judgment”, with M. Lemon and A. Milburn, Institute of Chartered Accountants of Ontario Annual Conference, Waterloo, Ontario, June 9-11, 1985.

“Effect of Research Methods on Audit Strategy Planning and Review Judgments by External Auditors”, with W. M. Lemon, Canadian Academic Accountants Association Annual Conference, Montreal, Quebec, May 29-30, 1985.

“Audit Planning and Risk Analysis”, Institute of Internal Auditors (London Chapter), London, Ontario, May 9, 1985.

“Expert Systems: An Auditor on a Chip?” The Second Canadian Conference on Auditing and Computer Technology, April 15-17, 1985, Toronto, Canada.

“The Comprehensive Audit Planning System”, Compacs '85, Institute of Internal Auditors - UK, March 19-22, 1985, London, UK.

“A Hierarchical Approach to Planning Audit Evidence Gathering Procedures”, with R. Jensen, Symposium on Audit Judgment and Evidence Evaluation, University of Southern California, February 12-13, Los Angeles, California.

“Expert Systems -- The Training Hurdle of the Now Future”, Canadian Institute of Chartered Accountants, Human Resource Development Conference, January 13-15, 1985, Toronto, Ontario, Canada.

“Decision Support and Expert Systems”, Society of Management Accountants of Canada, December 6, 1984, Toronto, Ontario, Canada.

“Audit Planning and Risk Analysis”, Institute of Internal Auditors (Greater Boston Chapter), 1984, Eastern Regional Conference, Boston, October 15-17, 1984.

“The Second Auditing Course”, Price Waterhouse Auditing Symposium, Toronto, August 13-14, 1984.

“Planning for the Internal Audit Function”, Institute of Internal Auditors 43rd International Conference, Chicago, June 17-20, 1984.

“The Effect of Research Method on Audit Planning and Review Judgments”, Queen's University, Faculty of Management Studies, Kingston, Ontario, June 15, 1984.

“Integrating Computers into the Accounting Curriculum”, with H. Armitage, Canadian Academic Accountants Association Annual Conference, Guelph, Ontario, May 30-31, 1984.

“DSS for Internal Audit Planning”, U.S.C. Symposium on Auditing and Decision Support Systems, Los Angeles, February 7-8, 1984.

“Training the EDP Audit Specialist of the Future”, Canadian Conference on Auditing and Computer Technology, Toronto, October 17-19, 1983.

“Planning and Coordinating Audit Activities”, Institute of Internal Auditors (Minneapolis Chapter), Minneapolis, June 15, 1983.

“The First Auditing Course”, Canadian Academic Accountants Association Annual Conference, Vancouver, B.C., June 1-2, 1983.

“Auditing Advanced EDP Systems”, EDP Auditors Association, (Toronto Chapter), Toronto, November 18, 1982.

“Audit Documentation of Complex Systems”, 2nd CICA Symposium on Computers and Auditing, Toronto, November 15-18, 1981.

“The Internal Auditor's Responsibility Re: Compliance Audits”, Institute of Internal Auditors (Minneapolis Chapter), Minneapolis, February 18, 1981.

Pre - 1981

“Computer Data Bases: Disaster or Salvation?” Institute of Internal Auditors (London Chapter), London, Ontario, April 12, 1979.

“Debugging Your Computer Audit Program”, Institute of Internal Auditors (Rochester Chapter), Third EDP Audit Seminar, Rochester, N.Y., November 10, 1977.

Consulting, Expert Witness and Other Paid Professional Service

2010 - present

Law firm

Expert in lawsuit involving a company in the financial sector to opine on relevant auditing matters. 2021-2022

Law firm

Expert in class action certification process involving a lawsuit against a company in the cannabis sector to opine on relevant governance, internal control and reporting matters. 2020-2021

Law firm

Expert in class action certification process involving a lawsuit against a company in the cannabis sector and its auditor to opine on relevant auditing matters. 2020

Law firm

Expert in class action certification process involving lawsuit against a company in the gaming sector to opine on relevant governance, internal control and reporting matters. 2017-2018

Ontario Ministry of Training, Colleges and Universities, Postsecondary Education Quality Assessment Board (PEQAB)

Review of Humber College Institute of Technology and Advanced Learning Honours Bachelor of Commerce (Accounting). 2017

Siskinds, LLP.

Expert in class action lawsuit involving an auditor of a securities dealer to opine on relevant auditing matters. 2015-2017

Shared Services Canada,

Member of Independent Departmental Audit and Evaluation Committee 2012 - 2016

University of Toronto,

Review of Proposal for Master's program in Forensic Accounting 2016

Ontario Ministry of Training, Colleges and Universities, Postsecondary Education Quality Assessment Board (PEQAB)

Review of George Brown College's Bachelor of Applied Business Degree (Financial Services) (2014)

Law firm

Expert in class action suit involving a company in the resources sector to opine on relevant accounting and auditing matters. 2014

Ontario Ministry of Training, Colleges and Universities, 2013
Postsecondary Education Quality Assessment Board (PEQAB)
 Review of Niagara College's Bachelor of Commerce Degree (Accounting and Finance)

Ontario Ministry of Training, Colleges and Universities, 2012
Postsecondary Education Quality Assessment Board (PEQAB)
 Review of Seneca College's Bachelor of Commerce Degree (International Accounting and Finance)

Sutts, Strosberg LLP
 Expert in class action suit involving Manulife Insurance Company
 to perform calculation of demutualization benefits. 2012

Ontario Ministry of Training, Colleges and Universities, 2010
Postsecondary Education Quality Assessment Board (PEQAB)
 Review of Dalhousie University's Master of Business Administration (Financial Services)
 Program

2000 - 2009

CaseWare IDEA Inc.
 Report on Continuous Monitoring and Assurance

Ontario Ministry of Training, Colleges and Universities,
Postsecondary Education Quality Assessment Board (PEQAB)
 Review of Humber College Applied Business Degree Program (Accounting) 2009

Sutts, Strosberg LLP
 Expert in class action suit against MoneyMart, a chain of payday loan outlets, to oversee calculation of excess interest charged and to comment on other expert's report.

Law firm
 Expert in class action suit involving a credit union to perform calculation of excess interest charged.

Ontario Council on Graduate Studies
 Review of University of Toronto's DIFA Program,

Ontario Council on Graduate Studies
 Review of Seneca College Accounting Program

Public Accounting Firm
 Review and evaluation of training programs.

Law firm
 Expert witness regarding an auditor's procedures in the context of significant foreign exchange trading losses incurred by the auditee.

Law firm

Expert witness regarding a company's accounting choices in connection with a capital tax assessment.

Lerner and Associates Barristers & Solicitors

Drabinsky vs. KPMG: Expert witness re: KPMG's role 1998-2000

RCMP

Report on the accounting procedures used by management in connection with the failure of a financial institution

Microforum, Inc. (public company listed on the TSE)

Member of the Board of Directors, Chair of Audit Committee, 1997-2002.

1990 - 1999*Auditor General of Canada*

Member of Independent Advisory Committee, 1993-1999

Law firm

Report on audit requirements in connection with a business failure in the context of an undetected management fraud resulting in significant losses by creditors.

Canadian Institute of Chartered Accountants

Update CICA Task Force Report on Information Technology.

Commissioner of Official Languages

Report on methodology for measuring cost of some aspects of bilingual packaging requirements.
Advisor on project to measure the cost of some aspects of bilingual packaging requirements.

Canadian Trucking Firm

Review audit conducted by U.S. New York State Fuel Tax Auditors (for purposes of Appeal)
Support appeal of assessment by U.S. State of Pennsylvania Fuel Tax Auditors.

Canadian Institute of Chartered Accountants

Develop a series of seminars on contemporary research in accounting and auditing.

Law firm

Assess financial accounting practices followed by an auto parts manufacturer in the context of an appeal of a tax assessment.

Institute of Chartered Accountants of Newfoundland

Report on comparison of CA and CGA pre-qualification education programs to Select Committee of House of Legislative Assembly of Newfoundland.

Law firm

Assess financial disclosures by a public company to assess compliance with covenants made to debenture holders

Institute of Chartered Accountants of Alberta

Report and testimony before the Alberta Securities Commission on accounting education

Public Accounting Firm

Report on State of the Art re: Use/Development of Expert Systems in Public Accounting

Bastedo, Sheldon, McGivney & Peck, Barristers & Solicitors

Expert witness regarding accounting education programs

McCarthy & Tetrault Barristers & Solicitors

Expert witness regarding accounting education programs

Computer Distributor

Assess the validity of the company's claim for a Scientific Research and Development tax credit in connection with the company's development of a multi-user, network-based, micro-computer accounting system.

Pre - 1990

Office of the Controller General of Canada

Seminar on Risk-Based Planning. This seminar was presented to representatives of internal audit agencies throughout the government.

Institute of Chartered Accountants of Ontario

Information Systems Control & Audit Course. This course was commissioned by the ICAO to enable a distance education version of my ACC 453 course to be offered to students throughout Ontario. In addition to readings, lesson notes and taped lectures, the course preparation involved development of computer-assisted instructional aids as well.

Chrysler Corporation, Detroit, General Auditor

Review of Internal Audit Organization and Administrative Practices.

Certified General Accountants Association of Canada

Development of Management Auditing Course (577).

Bell Telephone Company of Canada, Internal Auditing Department

Review and evaluation of training programs.

International Activities

<i>Association of International Certified Professional Accountants (AICPA) Member of Information Integrity Trust Services Task Force (and predecessor groups)</i>	1996-present
<i>Monash University, Melbourne, Australia) Visiting Scholar</i>	April 2018
<i>Monash University, Melbourne, Australia) Visiting Scholar</i>	March 2017
<i>Queensland University of Technology (QUT), Brisbane Australia Visiting Scholar</i>	Nov 2015
<i>Information Systems Audit and Control Association, Member of International Curriculum Committee</i>	2002-2008
<i>National Accounting Institute (Beijing, China) under auspices of World Bank</i>	2003-2006
I was the project manager for this project which was a joint venture between the University of Waterloo Centre for Information Systems Assurance and PricewaterhouseCoopers. The project entailed the development of a six-day course on <i>Computer Information Systems and the Auditor</i> ; training the trainers and offering the course twice to partners and senior managers of Chinese auditing firms.	
<i>International Federation of Accountants</i>	1996-2002
Monitor IT environment on behalf of IFAC's Education Committee to identify any changes required to Education Guideline #11 on The Information Technology Curriculum for Professional Accountants.	
<i>Institute of Chartered Accountants of Pakistan</i>	1999
Invited lectures on Information Technology in the Accounting Curriculum, Lahore; Karachi; May, 1999.	
<i>International Federation of Accountants</i>	1999
Report on "Competency-Based Assessment" (with Carla Carnaghan), December, 1999	
<i>International Federation of Accountants</i>	1997-1999
Report on "The Accounting Curriculum and IT", July, 1999	
"Information Technology in the Accounting Curriculum," Accounting Education Conference, sponsored by IFAC, ICAA, ASCPA, Sydney, Australia, March 23, 1999.	
"Information Technology in the Accounting Curriculum," Accounting Education Conference, sponsored by IFAC, Bahrain, March, 1998.	
"Information Technology in the Accounting Curriculum," Accounting Education Conference, sponsored by IFAC, Miami, March, 1997.	

- Seminar on Auditing Practices in North America* 1995
Tsinghua University School of Management, Beijing, China, October 30-Nov 17, 1995.
(with Ping Zhang)
- International Federation of Accountants* 1994-95
Prepare an Education Guideline on the Information Technology Curriculum for Professional Accountants.
- Computer Assisted Auditing Techniques* 1994
Seminar for Federal Revenue Secretariat of Brazil, Brasilia, Brazil, November 21-25, 1994.
- Auditing Practices in North America* 1994
Seminar presented to Shanghai Audit Institute, Toronto, November 1, 1994.
- Auditing Practices in North America* 1994
Lectures in various locations in China, July 2-August 5, 1994.
During this period I also helped organize a four-course accounting program at Tsinghua University in Beijing to be offered by accounting faculty from the University of Waterloo.
- Introduction to Accounting Information Systems* 1993
St. Petersburg University of Economics and Finance, St. Petersburg, Russia, October 4-22, 1993.
- Introduction to Key Concepts of Managerial Accounting* 1992
Bishkek International School of Management, Bishkek, Kyrgystan, November 17-December 2, 1992.
- Arhus School of Business, Arhus, Denmark 1989
Invited lecture on “A Prototype Expert System for the Assessment of Inherent Risk and Prior Probability of Error”,
Research Conference on Controlling & Auditing, Arhus School of Business, Arhus, Denmark, August 28-30, 1989.
- Fiscal Auditing* 1985-1990
Project with Ministry of Finance School of Fiscal Administration, Brazil and Canadian International Development Agency, January 1985-December 1990.

I served as director of the project that implemented computer-assisted auditing facilities and provided training to over 120 auditors and management personnel in Brazil. Of these trainees, 30 received additional specialist training in Canada. Also, one of the trainees went on for further academic study, earning a MASc. degree in Information Systems from the University of Waterloo in 1990. The project is described in Boritz, J. E., “Bye, Bye Brazil”, *CA Magazine*, November 1989, pp. 36-43.