

David R. Cheriton School of Computer Science



The University of Waterloo's David R. Cheriton School of Computer Science is the largest academic concentration of computer science researchers in Canada. We have more than 100 faculty members, 60 administrative, instructional and technical staff, 4,000 undergraduate students and 475 graduate students.

Our CS research areas

- Algorithms and complexity
- Artificial intelligence and machine learning
- Bioinformatics
- Computer algebra and symbolic computation
- Computer graphics
- Cryptography, security, and privacy
- Data systems
- Formal methods
- Health informatics
- Human-computer interaction
- Programming languages
- Quantum computing
- Scientific computation
- Software engineering
- Systems and networking
- Theoretical neuroscience

Our new faculty members



Sepehr Assadi
Algorithmic graph theory, communication complexity, online algorithms, algorithmic game theory



Sihang Liu
Computer architecture, programming and system support for new and emerging architectures



Yang Lu
ML and statistical methods for genomics and proteomics data analysis



Sujaya Maiyya
Distributed data management, fault tolerance, data privacy and security



Pengyu Nie
ML and NLP for software engineering, software testing and formal verification



Shlomi Steinberg
Computer graphics, rendering and light transport, ray and wave optics



Hong Zhang
Large-scale data analytics, distributed ML training and serving systems, application and network scheduling, data centre networking, serverless computing and cloud computing

Our highlights

Cheriton School of Computer Science, top-ranked CS program in Canada for third year in a row

Maclean's 2023 University Rankings

Cheriton School of Computer Science, 22nd CS program internationally

2022 Quacquarelli Symonds World University Subject Rankings

Robin Cohen

Lifetime Achievement Award in Computer Science, CS-Can | Info-Can

Jimmy Lin

ACM Fellow

Wenhu Chen, Xi He, Gautam Kamath

Canada CIFAR AI Chairs

Sepehr Assadi

Sloan Research Fellowship

Distinguished Professor Emeritus Don Cowan

J.W. Graham Medal in Innovation and Computing

Charles Clarke, Jimmy Lin

Induction into ACM SIGIR Academy

Jo Atlee, ECE colleague Krzysztof Czarnecki, former students

10-year most influential paper award, VaMoS 2023

Daniel Berry, Sri Fatimah Tjong

Most influential paper award, REFSQ 2023

Jeremy Chen, Yuqing Huang, Mushi Wang,

Semih Salihoglu, Kenneth Salem

Best Experiment, Analysis and Benchmark Paper Award, VLDB 2022 • 2022 ACM SIGMOD Research Highlight Award

Ende Jin, Yizhou Zhang, Harvard colleague

Nada Amin

Distinguished paper award, PLDI 2023

Stacey Watson, Rochester Institute of Technology colleagues

Best paper award, MobileHCI 2022

Ryusuke Sugimoto, Christopher Batty,

Toshiya Hachisuka

Best paper award, SCA 2022

Niki Hasrati, Shai Ben-David

Best paper award, ALT 2023

Nikhita Joshi, Antony Albert Raj Irudayaraj,

Jeremy Hartmann, Daniel Vogel

Best paper award, SUI 2022

Muhammad Sulaiman, Mahdieh Ahmadi,

Mohammad A. Salahuddin, Raouf Boutaba,

Rogers colleague Aladdin Saleh

Best paper award, NOMS 2023

Lindsey Tulloch, Ian Goldberg

Best student paper award, PETS 2023

Ramazan Rakhmatullin, Andrew Qi Tang, Kevin Wan

First place, 2023 International Collegiate

Programming Contest North America

Championship

