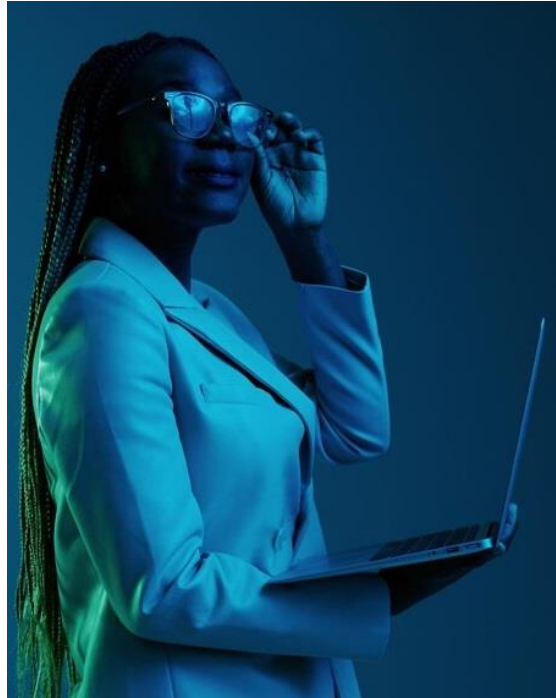# Digital Overground

**Cybersecurity and Privacy Institute Student Newsletter**

Hello folx! As March is Women's History Month, we are excited to highlight just a few of the myriad contributions that women have and continue to make to the field of cybersecurity and science! We gratefully acknowledge the great struggles that women have surmounted throughout history and hope that past and future generations will continue to benefit and be inspired by the foundational achievements of women in all aspects of human endeavour.

Perhaps there is no better place to start this topic than the life of Ada Lovelace, a mathematician who created what is considered the first computer algorithm in the 1840's!

We would also strongly encourage you to check out the following links for information on what women in cybersecurity are doing as well as ways to support their journeys.

[Empowering Women in Cybersecurity: Your Career Guide](#)

[50 Women in Cybersecurity Associations and Groups to Follow](#)

[WiCyS: Women in Cybersecurity](#)

[Top 10 Women in Cyber: Cyber Magazine](#)
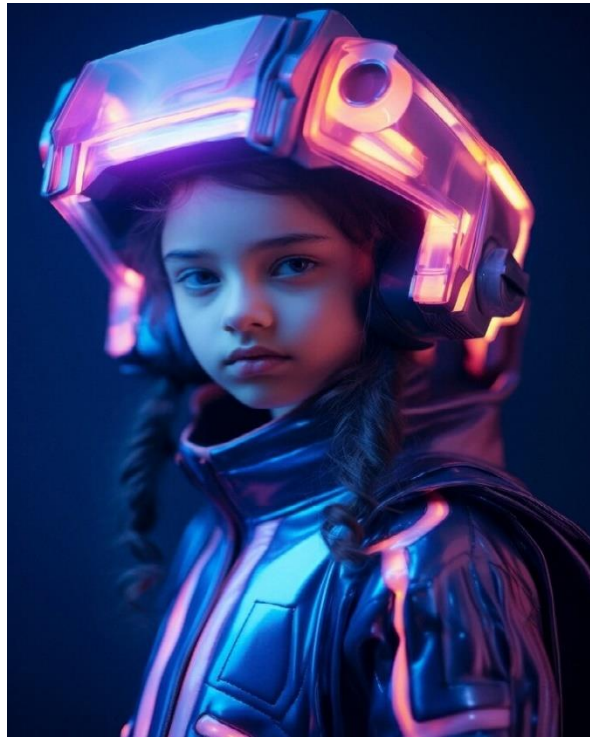
We would also like to direct you to our recent LinkedIn posts about CPI Members [Guang Gong](#), [Sirisha Rambhatla](#), [Leah Zhang-Kennedy](#), and [Bessma Momani](#), they are a quick read about their respective thoughts and ideas.

If you are interested in contributing to this newsletter, please email us at [CPI Students <cpi.students@uwaterloo.ca>](#) we welcome the help!

Upcoming Events

[Waterloo RoboHub Spring Symposium](#)

[Velocity Pitch Competition Finals](#)

[Waterloo RoboHub Spring Career Fair](#)

[Board Game Nights](#)

[Trivia Night](#)

[Warm Cookies and Hugs at V1](#)

Student Support and Resources

[Campus Wellness and Counselling Services](#)

[CPI for Students](#)

[Current Students Pathways](#)

[CPI Undergraduate Award](#)

[CPI Excellence Graduate Scholarship](#)

[The Vector Digital Talent Hub](#)

Research

Implicit Stylization for Domain Adaptation

Jinman Park, Francois Barnard, Saad Hossain, CPI Member Sirisha Rambhatla

Rate Reduction of Blind Quantum Data Compression with Local Approximations

Based on Unstable Structure of Quantum States

Kohdai Kuroiwa & CPI Member Debbie Leung

Are all classes created equal?

Domain Generalization for Domain-Linked Classes

Kimathi Kaai, Saad Hossain, CPI Member Sirisha Rambhatla

ORTOA: A Family of One Round Trip Protocols For

Operation-Type Obliviousness

CPI Member Sujaya Maiyya, Yuval Steinhart, Adrian Davila, Jason Du,

Divyakant Agrawal, Prabhanjan Ananth, Amr El Abbadi

The Platypus of the Quantum Channel Zoo

Felix Leditzky, CPI Member Debbie Leung, Vikesh Siddhu,

Graeme Smith, John A. Smolin

Waffle: An Online Oblivious Datastore for Protecting Data

Access Patterns

CPI Member Sujaya Maiyya, Sharath Vemula, Divyakant Agrawal,

Amr El Abbadi, CPI Member Florian Kerschbaum

Open Calls

The [Vector Digital Talent Hub](#) encourages students to create profiles on their website to apply for a variety of employment opportunities. | Vector Institute

[ICITST 2024 : International Conference for Internet Technology and Secured Transactions](#)

[2024 American Society of Criminology Annual Meeting](#)

The 2024 ASC Annual Meeting will be held at Marriott Marquis in San Francisco, CA from November 13-16, 2024. This year's theme is *Criminological Research and Education Matters: People, Policy, and Practice in Tumultuous Times*. Abstracts for thematic panels, individual papers, and author meets critic sessions are **due Friday, March 22, 2024.** Abstracts for posters, roundtable sessions and lightning talks are due **Friday, May 17, 2024.**

In the Media

- **Podcast of the Month: Cybersecurity Today – This episode features discussion on lessons learned from the ransomware attack on the British Library, advice for managing expectations of IT/security teams, why firms are leaving Google Firebase unprotected and more**
- **How I'd Learn AI (If I Had to Start Over)**
- **What's the future for generative AI? - The Turing Lectures with Mike Wooldridge**
- **GitHub Rolls Out 'Code Scanning Autofix' in Public Beta**
- **CISA Outlines Efforts to Secure Open Source Software**
- **Cyberespionage Campaign Targets Government, Energy Entities in India**
- **Microsoft Says Russian Gov Hackers Stole Source Code After Spying on Executive Emails**
- **Heartbleed is 10 Years Old – Farewell Heartbleed, Hello QuantumBleed!**

Seen anything that you think should be on this list for our next edition? Let us know!

CPI Students <cpi.students@uwaterloo.ca>

Secure Systems Group, University of Waterloo

Michael Wrana, Diogo Barradas, N. Asokan

Surveillance and Censorship in the Future Internet

Our March student spotlight is from Michael Wrana in Computer Science (Supervisor: Diogo Barradas & N. Asokan) with his poster: **The Spectre of Surveillance and Censorship in Future Internet Architectures**.

Recent initiatives known as Future Internet Architectures (FIAs) seek to redesign the Internet to improve performance, scalability, and security. However, some governments perceive Internet access as a threat to their political standing and engage in widespread network surveillance and censorship. In this paper, they provide an in-depth analysis into the designs of prominent FIAs, to help understand how FIAs impact surveillance and censorship abilities. Then, they survey the applicability of privacy-enhancing technologies to FIAs, concluding by providing guidelines for future research into novel FIA-based privacy-enhancing technologies, and recommendations to guide the evaluation of these technologies.

Find Out More about Digital Overground

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