



# Digital Overground

**Cybersecurity and Privacy Institute Student Newsletter**



Back to the grind! (insert appropriate anthem here)

Suggestions include:

[Ramones - Rock N' Roll High School](#)

[Bowling For Soup - High School Never Ends](#)

[High School Musical Cast - We're All In This Together](#)

We hope everyone had a good summer and would like to wish everyone a safe and productive Fall semester; maybe toss in some fun here and there, as time and budget will allow. Remember, we are all part of the same community of students, we gotta pull together and support each other when things get tough. A little silliness and blowing off steam goes a long way!

Moving on, CPI is holding its [Annual Conference](#) on **Oct. 13<sup>th</sup>** at Fed Hall. This includes a Student poster competition with \$1000 for the best poster! [Click the link](#) for details, registration is free, as is the food!

CPI would also like to remind everyone that the following classes in the Fall 2023 semester are eligible for the [CPI Undergraduate Award](#): AFM 347, CO 487, CS 458, GBDA 303, GBDA 414, SOCI/LS 305, SOC/LS 413, and SOC/LS 435 . Please take a moment to review this page as it lists the other classes for future semesters that will also be eligible for these awards.

For those who are interested in contributing to this newsletter, please email us at [CPI Students <cpi.students@uwaterloo.ca>](mailto:cpi.students@uwaterloo.ca) we would welcome the help!

## Upcoming Events

[2023 Cybersecurity and Privacy Institute Annual Conference  
w/ CPI Students Conference Poster Session](#)

[Thanksgiving Dinner at Residence \(CMH, V1 and REV\)](#)

[UW Farm Market](#)

[UPICA Diwali Dhamaka 2023](#)

[Waterloo Job Fair](#)

[Wicked Witches Halloween Weekend Market](#)

[Enchanted Witches Holiday Market in Fergus](#)

[Lightning in the Night: Spectacular Lanterns](#)

[Awakening Yoga • Weekly Class • Kitchener](#)

[HIRCHYTSIA](#)

[Halloween Dinner at CMH](#)

[KISS Cooking Show at Fed Hall](#)

## **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**

[Lox: Protecting the Social Graph in Bridge Distribution](#)

Lindsey Tulloch – Supervised by CPI Member Ian Goldberg

[ML Models for Detecting QoE Degradation in](#)

[Low-Latency Applications: A Cloud-Gaming Case Study](#)

Joël Roman Ky - Bertrand Mathieu –  
Abdelkader Lahmadi - CPI Member Raouf Boutaba

[End-to-End Encrypted Group Messaging with Insider Security](#)

Nik Unger – Supervised by CPI Member Ian Goldberg

[Post-quantum signatures in DNSSEC via request-based fragmentation](#)

Jason Goertzen – CPI Member Douglas Stebila

[An Approach for Detecting Multi-Institution  
Attacks](#)

Saif Zabarrah- Omar Naman - Mohammad A. Salahuddin -  
CPI Members - Raouf Boutaba - Samer Al-Kiswany

[PRSONA: Private Reputation Supporting Ongoing Network Avatars](#)

Stan Gurtler - Supervised by CPI Member Ian Goldberg

[Powertrace-based Fuzzing of CAN Connected Hardware](#)

Murray Dunne – CPI Member Sebastian Fischmeister

**Open Calls**

[NVIDIA Graduate Fellowship Program](#)

[2023 IEEE 9<sup>th</sup> Information Technology International Seminar \(ITIS\)](#)

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

USENIX Security '23 [Call for Papers](#)

[CSITAI 2023 : International Conference on Computer Science, Information Technology & AI](#)

[ICITST 2023 : International Conference for Internet Technology and Secured Transactions](#)

[CyberHunt 2023 : 6th Annual Workshop on Cyber Threat Intelligence and Hunting](#)

[WatITis 2023](#)

### In the Media

- Podcast of the Month: Podcast of the Month: [Cyber Security Today: This episode features discussion on October Security Awareness Month, ransomware, teenage hackers and the start of hearings into proposed Canadian privacy and AI laws](#)
- [Sirisha Rambhatla's real-world machine learning revolution is just beginning](#)
- [Discussing Interdisciplinarity & Research with Prof. Plinio Morita](#)

- [Chinese-Backed APT 'Flax Typhoon' Hacks Taiwan with Minimal Malware Footprint](#)
- [CISA Releases Open Source Software Security Roadmap](#)
- [The Reality of Cyberinsurance in 2023](#)
- [Air Canada Says Employee Information Accessed in Cyberattack](#)
- [How a Simple Bug in Software Ended 6 Lives](#)
- [How Google Alters Search Queries to Get at Your Wallet](#)
- [Lego Is a Company Haunted by Its Own Plastic](#)
- [AI Algorithms Are Biased Against Skin with Yellow Hues](#)
- [How to Use ChatGPT's New Image Features](#)
- [Your Internet Browser Does Not Belong to You](#)

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

[CPI Students <cpi.students@uwaterloo.ca>](mailto:cpi.students@uwaterloo.ca)

## Student Spotlight

CPI would like to congratulate Sajin Sasy on being awarded the 2023 [CPI Cybersecurity and Privacy Excellence Graduate Scholarship](#) sponsored by MasterCard.

We would also like to congratulate Andrew Dong, Samuel Orend, Taya Davison, Willard Ma, and Angie Yuliana Zuluaga for each receiving a [CPI Undergraduate Award](#) for the Spring 2023 Semester.



The September Student Spotlight expands upon the work of Rasoul Akhavan Mahdavi and their project entitled “[Constant-weight PIR: Single-round Keyword PIR via Constant-weight Equality Operators](#)”. Equality operators are an essential building block in tasks over secure computation such as private information retrieval. In private information retrieval (PIR), a user queries a database such that the server does not learn which element is queried. In this work, they propose  $\{equality\ operators\ for\ constant-weight\ codewords\}$ , ultimately showing that constant-weight PIR is the first practical single-round solution to single-server keyword PIR.

**[Find Out More about Digital Overground](#)**



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