# Digital Overground

**Cybersecurity and Privacy Institute Student Newsletter**

And we are back!! Welcome one and all to another Fall term, we hope those of you who had a summer break enjoyed it, and for those who kept working or studying, we hope you found time to goof off at least twice!

Here's hoping that the coming year is happy, healthy, and enriching for everyone. Remember, school is all about learning and building relationships, lean into being a part of this community and everyone benefits. The more we support each other the better this experience will be!

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

**Hallman Lecture: Creating sustainable working conditions**

**Navigating Misinformation: Trust in Information in the Digital Age**

**How to be a Climate Optimist: A talk by Chris Turner**

**National Day for Truth and Reconciliation**

**Careers in Hardware Technologies presented by Apple**

**Anti-Racism Reads: October event**

**Design a Community Cooling Space: Student Pitch Competition**

## 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

[The Spectre of Surveillance and Censorship in Future Internet Architectures](#)

Michael Wrana, CPI Member Diogo Barradas, & CPI Member N. Asokan

[Towards Sustainable Large Language Model Serving](#)

Sophia Nguyen, Beihao Zhou, Yi Ding, & CPI Member Sihang Liu

[On the Feasibility of Fingerprinting Collaborative Robot Traffic](#)

Cheng Tang, CPI Member Diogo Barradas,
CPI Member Urs Hengartner, & Yue Hu

[Uncertainty-Aware Decarbonization for Datacenters](#)

Amy Li, CPI Member Sihang Liu, & Yi Ding

[Differentially Private Data Generation with Missing Data](#)

Shubhankar Mohapatra, Jianqiao Zong,

CPI Member Florian Kerschbaum, & CPI Member Xi He

## 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](#)

[New York Annual Conference on Cyber Security 2024](#)
[December 14-15, 2024,](#)
[New York City](#)

[International Journal on Cybernetics & Informatics ( IJCI)](#)

[WatITis 2024 Conference](#)

# In the Media

- **Podcast of the Month:** Cybersecurity Today – In this episode of Cyber Security Today, host Jim Love discusses a new cyber security tool called Evilginx that bypasses multi factor authentication (MFA), Kaspersky's unexpected software replacement for North American users, ESET's patches for critical vulnerabilities, and a scathing FTC report on data collection by major tech companies. Learn about the latest cyber security threats and updates to stay informed and protected.
- I Studied Data Job Trends for 24 Hours to Save Your Career! (ft Datalore)
- It's too easy to own a WiFi network
- Master ChatGPT in 5 Minutes
- UN Experts Urge United Nations to Lay Foundations for Global Governance of Artificial Intelligence
- AI-Generated Malware Found in the Wild
- Critical Nvidia Security Flaw Exposes Cloud AI Systems to Host Takeover
- Researcher Says Healthcare Facility's Doors Hackable for Over a Year
- Critical Nvidia Security Flaw Exposes Cloud AI Systems to Host Takeover
- GitHub Makes Copilot Autofix Generally Available

## Student Spotlights

## Is Homomorphic Encryption Actually Practical?
### Rasoul Akhavan Mahdavi, Florian Kerschbaum

The September student spotlight comes to us from Rasoul Akhavan Mahdavi/CS Supervisor: Florian Kerschbaum, with their poster: Is Homomorphic Encryption Actually Practical?

Homomorphic Encryption is a novel form of encryption that permits computation over data in encrypted form. This offers a plethora of opportunities for secure and private access to data which can help address important scientific questions. However, there is still a gap between the performance of computation over encrypted data and plaintext computation. As part of my research, they analyze the different aspects in which homomorphic encryption is constrained and address those limitations.

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

CPI Students <cpi.students@uwaterloo.ca>

**Find Out More about Digital Overground**

Our mailing address is:

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