

# **Digital Overground**

Cybersecurity and Privacy Institute Student Newsletter



As June rolls by and the temperature continues to be evil us, here are a few jokes that might help lighten your day; it's summer, nobody should be working too hard.

An SQL statement walks into a bar and sees two tables. It approaches and asks... "May I join you?"

> What do you call a turtle that surfs the dark web? A TORtoise

What do you call an excavated pyramid? Unencrypted.

What do you call a group of math and science geeks at a party? Social engineers. We hope that put a smile on your face, or at least elicited a groan! Take it easy, we hope your month is going well.

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

### **Upcoming Events**

Main Street Music Series in Cambridge

The Gaslight District Summer Market

Kitchener Canada Day Celebration

From Targeting in Academia to Promoting Trust and Understanding

**Unlearning the Binary** 

Let's stand together — acknowledging the anniversary of the Hagey Hall attack

Employer Information Sessions - Software Engineering

Shad Waterloo 2024 Open Day Exhibits

**Student Support and Resources** 

<u>Campus Wellness and Counselling Services</u> <u>CPI for Students</u> <u>Current Students Pathways</u> <u>CPI Undergraduate Award</u> <u>CPI Excellence Graduate Scholarship</u> <u>The Vector Digital Talent Hub</u>

#### Research

<u>The impact of JUUL market entry on cigarette sales: evidence from a major chain</u> <u>retailer in Canada</u>

Yingying Xu, CPI Member Anindya Sen, Tengjiao Chen, Christopher M. Harris, & Shivaani Prakash

AI-Assisted Network-Slicing Based Next-Generation Wireless Networks

CPI Member Xuemin Shen, Jie Gao, Wen Wu, Kangjia Lyu, Mushu Li, Weihua Zhuang, Xu Li, & Jaya Rao

Not as easy as just update: Survey of System Administrators and
Patching Behaviours

Adam Jenkins, Linsen Liu, Maria Wolters, & CPI Member Kami Vaniea

DarkDialogs: Automated detection of 10 dark patterns on cookie dialogs Daniel Kirkman, CPI Member Kami Vaniea, & Daniel W. Woods

## Development of an Architecture for a Cyber-Physical Emulation Test Range for Network Security Testing

Aidan Browne, CPI Member Stacey Watson, & Wesley B. Williams

<u>OneButtonPIN: A Single Button Authentication Method for Blind or Low Vision Users</u> <u>to Improve Accessibility and Prevent Eavesdropping</u>

> Manisha Varma Kamarushi, CPI Member Stacey L. Watson, Garreth W. Tigwell, & Roshan L. Peiris

## **Open Calls**

The <u>Vector Digital Talent Hub</u> 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

<u>New York Annual Conference on Cyber Security 2024</u> <u>December 14-15, 2024, New York City</u>

International Journal on Cybernetics & Informatics ( IJCI)

WatITis 2024 Conference

## In the Media

- Podcast of the Month: <u>Cybersecurity Today This episode</u> reports on a warning to patch Serv-U applications, the workings of the Rafel trojan, and more
- <u>36 ChatGPT Tips for Beginners in 2024!</u>
- <u>The Future of Cybersecurity with Cisco & Splunk's \$28</u> <u>billion investment</u>
- 10 Free AI Animation Tools: Bring Images to Life
- <u>AWS Announces Authentication and Malware Protection</u>
   <u>Enhancements</u>
- <u>CISA Warns of PoC Exploit for Vulnerability in RAD</u>
   <u>SecFlow-2 Industrial Switch</u>
- <u>NIST Getting Outside Help for National Vulnerability</u>
   <u>Database</u>
- <u>CISA Conducts First AI Cyber Incident Response Exercise</u>
- <u>Microsoft Bows to Public Pressure, Disables Controversial</u>
   <u>Windows Recall by Default</u>

Seen anything that you think should be on this list for our next edition? Let us know! CPI Students <cpi.students@uwaterloo.ca>

#### **Student Spotlights**

## I Know What You Cloned Last Summer

Our May student spotlight comes to us from Sina Kamali/CS - Supervisor: Diogo Barradas, with the poster "<u>I Know What You Cloned Last Summer</u>".

In recent years, internet censorship has evolved in various ways. Censoring governments in multiple countries are resorting to more extreme measures to block users' access to materials deemed sensitive. To tackle these blocking mechanisms, several censorship circumvention tools have been developed to allow citizens to access blocked Internet content. Many of these censorship circumvention tools are hosted on GitHub. Thus, GitHub has always been a prime target for censoring countries. However, due to the critical role of GitHub in the socio-economical tissue of developed countries, it is rarely blocked. However, this doesn't necessarily imply that resourceful countries like China will give up on devising techniques to monitor users' activities on the website. In this ongoing work, they are paving the way to answer the following question: "Is the access to GitHub repositories trackable?" To do so, they first collect three representative GitHub repository datasets. Then, they adapt Website Fingerprinting techniques, tailoring them to perform a large-scale closed-world (the user can choose between a predetermined set of repositories) attack to determine the performance of our approach. The conclusion is that this is a possible attack with closed-world results showing accuracies upwards of 95%.

Find Out More about Digital Overground

Copyright © 2024 Cybersecurity and Privacy Institute University of Waterloo - All rights reserved.

Our mailing address is:

200 University Ave W. DC 3147 Waterloo, Ontario N2L 3G1