

Contact Info

Email hieul@uci.edu
Site <https://levanhieu.com>
Linkedin <https://www.linkedin.com/in/levanhieu>

Research Interests

Summary Privacy, Ads & Tracking Ecosystems, Filter Rule Generation, Network Measurements

Education

- Fall 2018 – **Doctor of Philosophy, UC Irvine.**
ongoing Electrical Engineering and Computer Science (EECS)
○ Advisor: Athina Markopoulou
○ Expected Graduation: June 2023
- 2021 **Master of Science in Computer Engineering, UC Irvine**, GPA–3.96/4.0.
○ Advisor: Athina Markopoulou
○ Thesis: Characterizing the Fire TV Advertising and Tracking Ecosystem
- 2009 **Bachelor of Computer Science and Engineering, UC Irvine**, GPA–3.6/4.0.
Campuswide Honors Program – Undergrad research on watershed extraction.
○ Undergrad Advisor: David Eppstein
○ Senior Research Report: Watershed Extractions

Publications

- 4 **H. Le**, S. Elmalaki, A. Markopoulou, Z. Shafiq, “AutoFR: Automated Filter Rule Generation for Adblocking,” *To appear in the Proceedings of the 32nd USENIX Conference on Security Symposium*, August 2023, arXiv:2202.12872.
- 3 R. Trimananda, **H. Le**, H. Cui, J. Ho, A. Shuba, A. Markopoulou, “OVRseen: Auditing Network Traffic and Privacy Policies in Oculus VR,” *Proceedings of the 31st USENIX Conference on Security Symposium*. August 2022.
- 2 **H. Le**, A. Markopoulou, Z Shafiq, “CV-INSPECTOR: Towards Automating Detection of Adblock Circumvention,” *Proceedings of Network and Distributed System Security Symposium 2021*.
- 1 J. Varmarken†, **H. Le†**, A. Shuba, A. Markopoulou, Z. Shafiq, “The TV is Smart and Full of Trackers: Measuring Smart TV Advertising & Tracking,” in *Proceedings of Privacy Enhancing Technologies Symposium (PETS/PoPETS) 2020*, Issue 2, pp. 129-154, May 2020. (†: co-first authors)

- * Anastasia Shuba, Evita Bakopoulou, Milad Asgari Mehrabadi, **Hieu Le**, David Choffnes, Athina Markopoulou, "AntShield: On-Device Detection of Personal Information Exposure," arXiv:1803.01261.

Work Experience

- Sept. 2018 – **Graduate Student Researcher**, *UC Irvine*.
Present My research focuses on the cat-and-mouse game between publishers & advertisers vs. adblockers. My work aims to facilitate the adblocking community by automating bottlenecks in the generation of filter rules.
- June 2021 – **Automation Engineer Intern**, *eyeo*.
Sept. 2021 Worked with the Anti-CV team to deal with ad-circumvention. Customized CV-Inspector as an automation tool for use by eyeo to detect when sites circumvent adblockers.
- Aug. 2017 – **Senior Software Developer**, *Internet Brands*, El Segundo, CA.
June 2020 Architect technical solutions for new features for websites, integrate with third-party partners, and plan production deployments for high traffic sites.
- Aug. 2016 – **Technical Consultant**, *Athina Markopoulou*, UC Irvine, Calit2.
May 2018 Software development for the AntMonitor project (<https://athinagroup.eng.uci.edu/projects/antmonitor/>): Android UI design, automated APK collection, contributing to research paper (TR1).
- Aug. 2013 – **Lead Software Developer**, *Metronome Software*, Laguna Hills, CA.
Aug. 2017 Lead in software development for multiple projects funding by government contracts, related to web development.
- April 2011 – **Software Developer**, *Metronome Software*, Laguna Hills, CA.
Aug. 2013 Involved in web development of multiple projects funded by government contracts.
- July 2009 – **Software Developer**, *InQuira (Oracle)*, Torrance, CA.
April 2011 Development of Adobe Flex applications.

Leadership & Academic Outreach

- 2022-present Nothing to Hide? A Data Privacy Podcast. <https://nothingtohide.online>
- 2022-present Elected Officer of Society of Graduate Electrical Engineers & Computer Scientist. <https://sites.uci.edu/geecs/>
- 2022-2023 USENIX Security Artifact Reviewer. <https://www.usenix.org/conference/usenixsecurity23/call-for-artifacts>
- 2022-2023 PoPETs Artifact Reviewer. <https://petsymposium.org/artifacts.php>
- June 2022 Graduate Students Panel for Privacy and IoT Research Exploration Workshop 2 (ProperData). <https://properdata.eng.uci.edu/events/privacyiot-workshop-2/>

Invited Talks

- Nov. 2022 "OVRSeen: Auditing Network Traffic and Privacy Policies in Oculus VR", *PrivacyCon 2022 (Hosted by FTC)*, Virtual, Talk given by Rahmadi Trimananda, <https://www.ftc.gov/news-events/events/2022/11/privacycon-2022/>
- Oct. 2022 "AutoFR: Automated Filter Rule Generation for Adblocking", *Adfiltering Dev Summit*, Virtual, <https://adfilteringdevsummit.com/>

- Oct. 2021 "Towards Automatic Generating and Testing of Filter Rules", *Adblocker Dev Summit*, Virtual, https://levanhieu.com/talk/adblockerdevsummit_2021/
- July 2021 "The TV is Smart and Full of Trackers", *PrivacyCon 2021 (Hosted by FTC)*, Virtual, Talk given by Janus Varmarken, https://levanhieu.com/post/ftc_privacycon_2021/
- Oct. 2020 "Revisiting Adblock Circumvention", *Adblocker Dev Summit*, Virtual, https://levanhieu.com/talk/adblockerdevsummit_2020
- Sept. 2019 "Measuring and Mitigating Adblock Circumvention in the Wild", *Adblocker Dev Summit*, Amsterdam, https://levanhieu.com/talk/adblockerdevsummit_2019/

Awards & Honors

- 2018 UCI EECS Department Fellowship Award
- 2009 UCI Campuswide Honors Program

Skills

- Languages Python, HTML, CSS, JavaScript, Java
- Tools Selenium, scikit-learn, Chrome Extensions, AWS EC2, Docker
- OS Mac OS, Ubuntu, Android