Victor Ongkowijaya

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Education

Princeton University – Princeton, NJ   Fall 2019 – Present
PhD, Computer Science, Advised by Prof. Jennifer Rexford

University of Michigan – Ann Arbor, MI   Fall 2015 – Winter 2019
BSE, Computer Science, *Magna Cum Laude*

Experience

University of Michigan – Ann Arbor, MI   Fall 2017 – Winter 2019
Research Assistant, Advised by Prof. Roya Ensafi

Censored Planet: Developed a platform to remotely measure network interference in 170+ countries
- Built DNS-side interference detection module from scratch using Go, one of three core product functionalities
- Automated the detection module for long-term data collection on Google Cloud, stably running for 1+ year
- Reached prominent news journals by disclosing censorship trends in Kazakhstan ⌁ and Saudi Arabia ⌁
- Published continuous data actively used by researchers at https://censoredplanet.org

Russian Censorship: Worked with activists to perform first-ever analysis of Russian censorship practices
- Procured and analyzed 5 years of leaked Russian internet blacklist data at a daily granularity
- Developed and executed a novel measurement system to detect and classify network interference
- Implemented software which was run by 14 activists in Russia to characterize residential censorship
- Co-authored a research paper appearing for publication at a major security conference (NDSS'20)

University of Michigan – Ann Arbor, MI   Fall 2017 – Winter 2019
Teaching Assistant, EECS 183: Introduction to Computer Science

- Collaborated with faculty to create and grade assignments, projects, and exams for 1000+ total enrolled students
- Led weekly sections for 30 students on C++/Python and held office hours helping ∼15 students weekly
- Performed in the top 25% of instructor effectiveness school-wide, as indicated by student surveys

Nokia Deepfield – Ann Arbor, MI   Summer 2017
Software Engineering Intern, Security Backend

Enterprise Network Security: Enhanced security software used by large companies and 90% of US cable network
- Implemented identification and whitelisting feature using Python, significantly reducing false security warnings
- Built new integration test pipeline which was 50% faster with 40% less crashes, executed on every code commit
- Fixed deployment issues as well as improved existing software components, resolving ∼20 tickets
- Presented project milestones to company leadership including CEO and CTO

Merit Network – Ann Arbor, MI   Fall 2016 – Winter 2017
Research Assistant, Advised by Dr. Michalis Kallitsis

ISP Network Security: Enhanced security software affecting all users of a 4000-mile internet fiber optic network
- Analyzed real-world DNS traffic to research security methods against botnet activity and potential DDoS attacks
- Implemented DNS traffic visualization tool and extended the currently deployed network monitoring software
- Presented a poster at the annual university undergraduate research symposium to ∼30 total visitors

Skills

- C, C++, C#, Python, Go, Java, Javascript, HTML/CSS, SQL, Matlab, Bash, Git, R, ARM/x86
- Linux, Windows, Mac OS, Google Cloud Platform, Amazon Web Services