MIKE WONG

mikedwong@cs.princeton.edu \lor https://michaeldwong.github.io

RESEARCH INTERESTS

Computer systems and networks, program analysis, ML+systems, video analytics

EDUCATION

Princeton University Ph.D. in Computer Science Advisor: Ravi Netravali	Aug 2021 – May 2026 (expected)
New York University B.A. in Computer Science	Aug 2015 – Dec 2019

EXPERIENCE

Graduate Research Assistant, Princeton University Advisor: Ravi Netravali	Aug 2021 - Present
Research Intern, Microsoft Research Networking Research Group	June 2022 - Aug 2022
Computer Scientist, National Security Agency	Feb 2020 - Aug 2021
Research Assistant, Rutgers University Advisor: Srinivas Narayana	June 2020 - Jan 2021
Research Assistant, Courant Institute of Mathematical Sciences Advisor: Anirudh Sivaraman	May 2019 - June 2020
Computer Science Co-op, National Security Agency	Aug 2016 - Dec 2019

PUBLICATIONS

Peer-Reviewed Conference Papers

1. MadEye: Boosting Live Video Analytics Accuracy with Adaptive Camera Configurations

Mike Wong, Murali Ramanujam, Guha Balakrishnan, Ravi Netravali USENIX NSDI 2024 (to appear)

Preprint

2. NetVigil: Robust and Low-Cost Anomaly Detection for East-West Data Center Security Kevin Hsieh*, Mike Wong*, Santiago Segarra, Sathiya Kumaran Mani, Trevor Eberl, Anatoliy Panasyuk, Ravi Netravali, Ranveer Chandra, Srikanth Kandula (* equal contribution) USENIX NSDI 2024 (to appear)

Preprint

3. Marvolo: Programmatic Data Augmentation for Practical ML-Driven Malware Detection

Mike Wong, Edward Raff, James Holt, Ravi Netravali

ECML PKDD 2023

Previous version in AI4Cyber/MLHat at KDD 2022

Paper

4. Synthesizing Safe and Efficient Kernel Extensions for Packet Processing

Qiongwen Xu, **Michael D. Wong**, Tanvi Wagle, Srinivas Narayana, Anirudh Sivaraman ACM SIGCOMM 2021

Also accepted as a talk to the BPF & Networking Summit at Linux Plumbers Conference 2021 $\overline{\text{Paper}}$

5. Testing Compilers for Programmable Switches Through Switch Hardware Simulation Michael D. Wong, Aatish Kishan Varma, Anirudh Sivaraman ${\rm ACM~CoNEXT~2020}$ Paper

6. Switch Code Generation Using Program Synthesis

Xiangyu Gao, Taegyun Kim, Michael D. Wong, Divya Raghunathan, Aatish Kishan Varma, Pravein Govindan Kannan, Anirudh Sivaraman, Srinivas Narayana, Aarti Gupta $ACM \ SIGCOMM \ 2020$

Paper

TEACHING

Teaching Assistant, COS 316: Principles of Computer System Design	Aug 2023 - Dec 2023
Teaching Assistant, COS 561: Advanced Computer Networks	Jan 2023 - May 2023
WARDS	

\mathbf{AW}

Ross Fellowship (declined), Purdue University	Feb 2021
University Honors Scholar, New York University	Dec 2019
U.S. Air Force ROTC Scholarship, U.S. Air Force	May 2015