

DYLAN J. WOLFF

12 Holland Avenue #22-31, Singapore, SG (*Citizenship: USA*)
+1 · 857 · 247 · 5573 (c) ◇ wolffd@comp.nus.edu.sg ◇ dylanjwolff.com

EDUCATION

National University of Singapore Ph.D. in Computer Science (GPA: 5/5)	2021 - Present Singapore, SG
ETH Zürich M.S. in Computer Science, Concentration: Information Security (GPA: 5.33/6)	2018 - 2020 Zürich, CH
Boston College B.S. in Computer Science, Minor in Mathematics (GPA: 3.79/4, <i>magna cum laude, honors program</i>)	2011 - 2015 Newton, MA

PUBLICATIONS

1. [S&P'26] Zhengxiong Luo, Huan Zhao, Dylan Wolff, Cristian Cadar, Abhik Roychoudhury. “*Agentic Concolic Execution*” 47th IEEE Symposium on Security and Privacy, 2026 (to appear)
2. [CACM'25] Dylan Wolff, Martin Mirchev, Abhik Roychoudhury. “*Large Language Models in Software Security Analysis*.” Communications of the ACM (CACM), 2025 (to appear)
3. [EMSE'25] Dylan Wolff, Yannic Noller, Ridwan Shariffdeen, Abhik Roychoudhury. “*Shifting Fuzzing Left in Software Workflows*.” Empirical Software Engineering (EMSE), 2025
4. [TOSEM '25] Dylan Wolff, Marcel Böhme, Abhik Roychoudhury. “*Fuzzing: On Benchmarking Outcome as a Function of Benchmark Properties*.” Transactions on Software Engineering and Methodology (TOSEM), 2025
5. [ASPLOS '25] Huan Zhao, Dylan Wolff, Umang Mathur, Abhik Roychoudhury. “*Selectively Uniform Concurrency Testing*.” 30th International Conference on Architectural Support for Programming Languages and Operating Systems (ASPLOS), 2025
6. [ASPLOS '24] Dylan Wolff, Zheng Shi, Gregory J. Duck, Umang Mathur, Abhik Roychoudhury. “*Greybox Fuzzing for Concurrency Testing*.” 29th International Conference on Architectural Support for Programming Languages and Operating Systems (ASPLOS), 2024

WORK EXPERIENCE

Amazon Web Services <i>Applied Scientist Intern</i>	2025 Seattle, WA
· Optimized the performance of Shuttle , an open-source Rust concurrency testing tool, including novel yield-point optimizations; reduced runtime by 50% on large-scale storage applications within S3	
· Introduced notion of “time models”, enabling Shuttle to explore timing related concurrent behaviors such as timeout cancellation	
· Refactored Shuttle yield-point placement and added stable task and resource identifiers to facilitate advanced scheduling algorithms	
Mathworks <i>Support and Software Engineer</i>	2015-2018 Natick, MA
· Rotated through several software development projects on different teams across the company ranging from C++ development of core MATLAB to Java/JS centric web infrastructure	
· Received only $\geq 4/5$ in overall customer satisfaction surveys over the course of 13.5 months of technical phone and email support of MATLAB ($\mu = 4.8$); selected as a support team leader for handling escalations and organizing shifts	

ACADEMIC AWARDS AND HONORS

President's Graduate Fellowship (NUS) John J. Neuhauser Award (BC) – Awarded annually for most outstanding achievement in Computer Science	2021 2015
---	--------------

TECHNICAL SKILLS

Languages	Python, Rust, Zig, C, Java, MATLAB, Javascript, SQL, Datalog, Viper, SMT-LIB
Technologies	LLVM, Docker, SQLite, Pandas, Z3, Maven, Kubernetes, React, E9Patch, eBPF
Other Skills	Fuzzing, Program Analysis, Deductive Verification, Reverse Engineering, Concurrency Testing