

# DYLAN J. WOLFF

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## EDUCATION

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

## PUBLICATIONS

- [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)
- [CACM'25] Dylan Wolff, Martin Mirchev, Abhik Roychoudhury. "Large Language Models in Software Security Analysis." Communications of the ACM (CACM), 2025 (to appear)
- [EMSE'25] Dylan Wolff, Yannic Noller, Ridwan Shariffdeen, Abhik Roychoudhury. "Shifting Fuzzing Left in Software Workflows." Empirical Software Engineering (EMSE), 2025
- [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
- [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
- [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

<b>Amazon Web Services</b> <i>Applied Scientist Intern</i>	2025 Seattle, WA
<ul style="list-style-type: none"><li>Optimized the performance of <a href="#">Shuttle</a>, an open-source Rust concurrency testing tool, including novel yield-point optimizations; reduced runtime by 50% on large-scale storage applications within <a href="#">S3</a></li><li>Introduced notion of "time models", enabling Shuttle to explore timing related concurrent behaviors such as timeout cancellation</li><li>Refactored Shuttle yield-point placement and added stable task and resource identifiers to facilitate advanced scheduling algorithms</li></ul>	
<b>Mathworks</b> <i>Support and Software Engineer</i>	2015-2018 Natick, MA
<ul style="list-style-type: none"><li>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</li><li>Received only <math>\geq 4/5</math> in overall customer satisfaction surveys over the course of 13.5 months of technical phone and email support of MATLAB (<math>\mu = 4.8</math>); selected as a support team leader for handling escalations and organizing shifts</li></ul>	

## ACADEMIC AWARDS AND HONORS

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

## TECHNICAL SKILLS

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