

Sherman Lim

shermanlim@cmu.edu

<https://www.shermanjlim.com>

EDUCATION	Carnegie Mellon University PhD in Computer Science • Advisor: Prof. George Amvrosiadis	Pittsburgh, PA Aug 2025 - Present
	National University of Singapore (NUS) Bachelor of Computing (Computer Science) with Highest Distinction • GPA: 4.88 out of 5.00 • Thesis: Congestion Control Speciation in QUIC • Advisor: Prof. Ben Leong	Singapore Aug 2019 - Jan 2023
PUBLICATIONS	Sidharth Sankhe, Felix Zhang, Umayrah Chonee, Sherman Lim , Jason Hu, Jialin Li, and Qizhen Zhang. “PD3: Prefetching Data with DPUs for Disaggregated Memory”. In Proceedings of the 23rd USENIX Conference on Networked Systems Design and Implementation (NSDI ’26). May 2026. Ayush Mishra, Sherman Lim , and Ben Leong. “Understanding Speciation in QUIC Congestion Control”. In Proceedings of the 22nd ACM Internet Measurement Conference (IMC ’22). October 2022.	
EXPERIENCE	National University of Singapore Research Assistant Advisors: Prof. Jialin Li and Prof. Qizhen Zhang (University of Toronto) • Co-designed data systems with DPUs (data processing units) to accelerate disaggregated memory operations via improved data prefetching.	Singapore Apr 2025 - Jul 2025
	Jump Trading Software Engineer • Built low-latency systems in C++ for high-frequency trading applications. • Co-designed an improved low-latency inter-process communication solution with a specific microarchitecture. • Led the development of critical software in many domains, including market risk management, market data consumption, order submissions, software interfacing with FPGAs, and software for embedded programming environments. • Mentored a summer intern: designed the project in the area of performance benchmarking and guided the intern.	Singapore Jan 2023 - Feb 2025
	National University of Singapore Research Assistant Advisor: Prof. Ben Leong • Conducted measurement study to evaluate QUIC stacks’ implementations of standard TCP congestion control algorithms (CCAs). • Developed QUICbench, a QUIC CCA benchmarking tool, and used it to show that current QUIC CCAs do not conform to the standard. Identified causes of QUIC CCAs’ non-conformance.	Singapore Jan 2021 - Nov 2022
	Jump Trading Software Engineer Intern • Designed and implemented a C++ test framework that markedly improved live testing of our order submission system, which identified serious bugs and became part of our release process.	Singapore May 2022 - Jul 2022
	ByteDance Software Engineer Intern • Developed Java database driver library for a data warehouse based on the open-source ClickHouse.	Singapore May 2021 - Jul 2021

TEACHING EXPERIENCE	Teaching Assistant, CS3210 Parallel Computing, NUS Teaching Assistant, CS2106 Introduction to Operating Systems, NUS Teaching Assistant, CS2040S Data Structures & Algorithms, NUS Teaching Assistant, CS2040S Data Structures & Algorithms, NUS	Fall 2022 Spring 2022 Spring 2021 Fall 2020
AWARDS	NUS Merit Scholarship , NUS Full-ride, merit-based scholarship for undergraduate study at NUS.	2019 - 2023
	Outstanding Undergraduate Researcher Prize (Individual) , NUS Annual award that recognizes top undergraduate researchers in NUS.	2022
	Dean's List , NUS School of Computing Awarded in Fall 2020, Fall 2021, Spring 2022, and Fall 2022.	2020 - 2022
	USP Honor Roll , NUS University Scholars Program Award for exemplary performance in the multidisciplinary program focused on core academic skills.	Fall 2020
COURSEWORK PROJECTS	CS4212 Compiler Design , NUS • Built a compiler in OCaml to compile a subset of C to x86 assembly. Awarded Top Student.	Fall 2022
	CS4223 Multi-core Architectures , NUS • Designed and implemented a software simulator for a multi-core system with cache coherence.	Fall 2022
	CS3203 Software Engineering Project , NUS • Led team of 6 to implement a C++ tool for static program analysis (\approx 10,000 lines of code).	Spring 2022
	CS3216 Software Product Engineering for Digital Markets , NUS • Ideated, developed, and marketed a social network app in a team of 4. Implemented web backend. • Won 1st Place in the 19th School of Computing Term Project Showcase (STePS) for the app.	Fall 2021