

# Alan Zhu

SOFTWARE ENGINEER AT MICROSOFT

SEATTLE, WA

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## Education

2023 - 2024	M.Eng, Electrical Engineering and Computer Science, MIT Graduate coursework: 6.581 (Operating Systems Seminar), 6.583 (Database Systems), 6.590 (Computer System Architecture), 6.840 (Theory of Computation), 6.S983 (Secure Hardware Design), 6.S984 (Datacenter Computing)	Cambridge, MA
2019 - 2023	S.B., Writing and Computer Science and Engineering, MIT	Cambridge, MA

## Research

*Interests* Operating systems, computer architecture, hardware-software co-design

### PREVIOUS PROJECTS

2023 - 2024	Exploiting irregular parallelism to accelerate FPGA routing. Master's thesis, supervised by Daniel Sanchez, <a href="#">link here</a> .
2022 - 2023	Towards better social media regulation, supervised by Aleksandr Madry. SuperUROP, <a href="#">description here</a> .
2021	Using referring expression generation to model literary style, with Joanne Yuan, Ardalan SadeghiKivi, and Nick Montfort. In <i>Proceedings of the Workshop on Natural Language Processing for Digital Humanities (NLP4DH) 2021</i> , <a href="#">link here</a> .

## Work Experience

Aug. 2024 -	Software Engineer, Microsoft Working on OS power management, with a particular focus on processor power management.	Redmond, WA
Jun. - Aug. 2023	Software Engineer Intern, Microsoft Worked on algorithmic improvements for processor power management (core selection, thread scheduling) on heterogeneous computer architectures based on hardware feedback.	Redmond, WA
Jun. - Aug. 2022	Software Engineer Intern, Microsoft Worked on improving live debugging tools for an advertising auction server.	Bellevue, WA
Jun. - Aug. 2021	SDE Intern, Amazon Worked on improving code-based data pipelines for internal tools for marketing.	Remote

## Teaching

Spring 2024	6.190, Introduction to Low-Level Programming in C and Assembly, Teaching Assistant
Fall 2023	6.191, Computation Structures, Teaching Assistant
Spring 2023	6.0004, Introduction to Low-Level Programming in C and Assembly, Lab Assistant
Fall 2021	6.0001/2, Introduction to Computer Science and Programming in Python, Lab Assistant
Spring 2021	CC.802, Physics II, Teaching Assistant

## Leadership + Service

2021-2023	Dormitory Council, Vice President (2022-2023), Judicial Committee Chair (2021-2022)
2020-2022	Next House Exec Board, President (2022), Vice President (2021), and other committees
2021-2022	Schwarzman College of Computing Undergraduate Advisory Group, Member

## Other

<i>Honors</i>	Phi Beta Kappa, Wiesner Award for Student Art, Alan Brody Prize in Theatre Arts
<i>Languages</i>	English (native), Chinese (fluent), Spanish (intermediate)
<i>Skills</i>	C/C++, Python, $\LaTeX$ , C#, Java, HTML/JS/CSS, Go
<i>Other Skills</i>	Conducting for musical theatre, playwriting, bouldering, walking long distances, going to Seattle Sounders games