Maxwell Lin

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EDUCATION

Duke University | GPA: 4.0

Durham, North Carolina

Bachelor of Science in Computer Science, Bachelor of Science in Mathematics Phi Beta Kappa, Dean's List with Distinction

Expected May 2026

Work Experience

Amazon Web Services (AWS), Software Engineer Intern

May 2025 – August 2025

- Independently designed and implemented a new CloudTrail product using TypeScript/React that visualizes customers' AWS topology, reducing security investigation time by 10x
- Delivered project 1 month ahead of schedule; integrated Anthropic Claude AI summarization as stretch goal

Gluroo, Software Engineer Intern

May 2024 – August 2024

- Developed a diabetes management app (100K users, 4.8/5.0 App Store) using React, GraphQL, and Postgres
- Designed and implemented components for group text/image messaging, user prescriptions, and settings

PROJECTS & PUBLICATIONS

Duke Robotics, President

August 2022 – August 2025

- Led 20 engineers (\$50K budget) in the design, implementation, and testing of autonomous underwater vehicles
- Placed in the finals (7th of 58 teams) in the 2025 RoboSub Competition
- Led work on technical design report (2nd place, 2023) and website (2nd place, 2024)
- Led design and development of a TypeScript/React GUI that interfaces with ROS systems
- Led development of a 3D Unity sim that generates synthetic CV data, cutting manual annotation time by 100x
- Increased object detection rate by 20x through strategic elimination of bottlenecks in the YOLO CNN pipeline
- Reviewed and maintained 50,000-line codebase; led migration to ROS 2

Networks and Distributed Systems Lab, First Author

May 2023 – April 2025

- First author of a research publication (Browsing without Third-Party Cookies: What Do You See?) at the 2024 ACM Internet Measurement Conference (20% acceptance rate)
- Presented at IMC '24 (Madrid) as 1 of only 2 undergrads
- Developed a highly scalable web crawler; deployed across 20 Slurm jobs to measure 10K websites

Awards

CRA Outstanding Undergraduate Researcher Award, Honorable Mention

December 2024

• Received honorable mention as 1 of only 4 Duke nominees

National Cyber League, Diamond Division

October 2023

• Ranked top 10% of 15,000 contestants at the National Cyber League cybersecurity competition

HackDuke, Energy and Environment Track Award

October 2022

Part of a 5-person team that earned the Energy & Environment Track Award among 175 participants

TEACHING

CS 390 (Software Reverse Engineering), Teaching Assistant

January 2024 – May 2024

Held office hours & graded problem sets

SKILLS

Programming: Python, JavaScript/TypeScript, Java, C, SQL

Technologies: React, Redux, AWS, Claude, ROS, Selenium, Git, Docker, Slurm, HTML, CSS, LATEX