Nathaniel Y. Chong

nathanielchong.github.io • nychong@umich.edu • (571) 332-7096

SCHOOL ADDRESS 1210 Cambridge Ct, Ann Arbor, MI 48104

14397 Chalfont Drive Haymarket, VA 20169

PERMANENT ADDRESS

OBJECTIVE

Current Master's student seeking full-time software engineering roles (available Summer 2023)

EDUCATION

University of Michigan

Ann Arbor, MI

M.S.E. in Electrical & Computer Engineering – Computer Vision

May 2023

B.S.E. in Computer Science, GPA: 3.86/4.00

May 2022

Key Courses: Computer Vision (EECS 442), Machine Learning (EECS 445), Applied Regression Analysis (STATS 413), Operating Systems (EECS 482), Computer Security (EECS 388)

RELEVANT **EXPERIENCE**

Meta (formerly known as Facebook)

Menlo Park, CA

Software Engineering Intern, Instagram (Android)

May 2022 - Aug. 2022

- · Conceptualized and developed an action menu in Instagram Boards (a collaborative canvas) that surfaces creative tools and attribution information which was deployed to 2M+ users
- Designed and implemented Android client, server, and logging logic to enable 95% of Instagram NZ users to "Send to Back", "Save", and manipulate Instagram Boards content
- Initiated and drove discussions with cross-functional partners on content design, product decisions, and user experience to incorporate project deliverables as a new add-on to the 1st Boards public launch

Northrop Grumman Xetron

Cincinnati, OH

Software Engineering Intern (Remote), Xetron

May 2021 - Present

- Developed and integrated a live sensor data pipeline into a web-based analytics application with senior engineers to eliminate dependency on mock data
- Enabled customers to retrieve sensor data from the web app's map view by implementing geographic shape search functionality using Angular and CesiumJS
- Delivered UI updates and addressed bug fixes across 3+ releases by leveraging customer feedback

Northrop Grumman

McLean, VA

Software Engineering Intern (Remote), Mission Systems

May 2020 - July 2020

- Implemented the Cypress testing suite and developed automated E2E test cases for the codebase, thereby streamlining development across 2+ version changes
- Scaled a web-based metrics dashboard on the MEAN stack following the Agile/Scrum methodology
- Collaborated with a cross-functional team on front-end development, bug fixes, and UI changes using React, Type Script, and Java Script

University of Michigan Radiology Lab

Ann Arbor, MI

Research Assistant, Computer Aided Diagnosis of Breast Cancer

Oct. 2019 - Feb. 2020

- · Analyzed layer-specific learning rates to improve diagnosis accuracy in a deep learning algorithm
- Improved the training procedure with TensorFlow data augmentation and Sigmoid activations

U.S. Naval Research Laboratory

Washington, D.C.

Engineering Intern, Plasma Physics Division

June 2018 - Aug. 2019

2018, 2019 Summers:

- Led the simulation of nonlinear scattering on a diode-loaded dipole to analyze harmonic generation
- Devised a new technique to gauge the the ionosphere's F-region for ocean scattering experiments
- Simulated the F-region of the ionosphere for analysis of a mathematical model

LEADERSHIP

Eta Kappa Nu (HKN) EECS Honor Society

Ann Arbor, MI

Incoming Operations Officer, previously Corporate Relations Officer Aug. - Dec. 2021, Aug. - Dec. 2022

- Organizing, advertising, and hosting recruiting events with corporate partners for 40+ students
- Communicating with companies regularly to facilitate sponsorship of HKN corporate events

Treasurer

Jan. - May 2021, Jan. - May 2022

- Managed chapter finances by creating a budget, depositing checks, and filing tax documents
- Coordinated payment information to corporate sponsors and maintained financial records

AWARDS & **DISTINCTIONS** 2019, 2020, 2021, 2022 Amazon AWS InCommunities Scholarship Recipient

2019 Raytheon FRC Robotics Scholarship Recipient

2019 Micron STEM Scholarship Recipient

SKILLS Java, C++, Kotlin, Bash, Git, HTML/CSS, JS, Python, MATLAB, Linux, Arduino, Soldering, Basic Korean