Nathaniel Y. Chong

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

SCHOOL ADDRESS
330 Thompson St, #1
Ann Arbor, MI 48104

PERMANENT ADDRESS
14397 Chalfont Drive
Haymarket, VA 20169

OBJECTIVE

Current senior seeking a software engineering internship (available May - Aug. 2022)

EDUCATION

University of Michigan — **Ann Arbor, MI**
- *B.S.E. in Computer Science, GPA: 3.85/4.00* — *May 2022*
- *Planned M.S.E. in Computer Science* — *May 2023*

Key Courses*:* Operating Systems (EECS 482), Computer Vision (EECS 442), Machine Learning (EECS 445), Applied Regression Analysis (STATS 413), Computer Security (EECS 388), UI Development (EECS 493), Data Structures & Algorithms (EECS 281)

RELEVANT EXPERIENCE

Northrop Grumman Xetron — **Cincinnati, OH**
Software Engineering Intern (Remote) — *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 the effect of learning rates across individual layers in a deep learning image diagnosis algorithm to prevent overfitting and improve diagnosis accuracy
- Gained familiarity with TensorFlow, Keras, and Python by improving the training procedure with data set, activation function, and argument manipulation

U.S. Naval Research Laboratory — **Washington, D.C.**
Engineering Intern, Plasma Physics Division — *June 2018 - Aug. 2019*

2019 Summer:
- Led the simulation of nonlinear scattering on a diode-loaded dipole to analyze harmonic generation
- Developed 3 nonlinearly loaded dipoles for physical scattering and validation of simulations

2018 Summer:
- Devised a novel measurement technique in order to gauge the topside thickness parameter of the ionosphere's F-region for ocean scattering and ionosonde 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**
Corporate Relations Officer — *Aug. 2021 - Present*
- 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. 2021 - May. 2021*
- 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

U.S. NRL Science and Engineering Apprenticeship Program – 1st Place for Outstanding Presentation of Research (2018 & 2019) –1st author of paper published in Antenna Applications Symposium
2019, 2020, 2021 Amazon AWS In Communities Scholarship Recipient
2019 Raytheon FRC Robotics Scholarship Recipient
2019 Micron STEM Scholarship Recipient

SKILLS

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