

Nathaniel Y. Chong

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SCHOOL ADDRESS

205 S. State Street, 3D
Ann Arbor, MI 48104

PERMANENT ADDRESS

14397 Chalfont Drive
Haymarket, VA 20169

OBJECTIVE

Current sophomore seeking a software engineering internship (available May - Aug. 2021)

EDUCATION

University of Michigan Ann Arbor, Michigan May 2023
B.S.E. in Computer Science, GPA: 3.88, Current courses: EECS 376, EECS 370, STATS 412
Battlefield High School Haymarket, Virginia May 2019
Valedictorian, Rank 1/763. GPA: 4.93/4.0

RELEVANT EXPERIENCE

Northrop Grumman McLean, VA May 2020 - July 2020
Software Engineering Intern, Mission Systems

- Implemented the Cypress testing suite and developed automated E2E test cases for the codebase, thereby streamlining development across 2+ version changes
- Improved and scaled a web-based metrics dashboard (built 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 Oct. 2019 - Feb. 2020
Research Assistant, Computer Aided Diagnosis of Breast Cancer

- Analyzed the effect of learning rates across individual layers in a deep learning image diagnosis algorithm to prevent overfitting, allowing a potential improvement in 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. June 2018 - Aug. 2019
Engineering Intern, Plasma Physics Division

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, Michigan Sept. 2020 - Present
Tech Talk Chair

- Hosting corporate information sessions for 40+ students to network with company recruiters and learn about new opportunities
- Communicating with companies regularly to facilitate sponsorship of HKN corporate events

3-D Printing/Hobby Electronics Club Manassas, Virginia May 2018 - May 2019
Co-Founder and Co-President

- Founded the new organization to teach 15+ peers how to 3-D print, use hobby electronics platforms (i.e. Raspberry Pi, Arduino), and develop skills in soldering/breadboarding

ILITE Cyber Defense Team Haymarket, Virginia Sept. 2015 - May 2019
Secretary and Linux Co-Lead

- Created automated bash scripts in order to secure Ubuntu 14+ operating systems
- Documented meeting minutes and authored monthly newsletters to ensure smooth team operation
- Prepared a thorough curriculum to teach 50+ students about Linux cyber security on a regular basis

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 Amazon AWS In Communities Scholarship Recipient
2019 Raytheon FRC Robotics Scholarship Recipient
2019 Micron STEM Scholarship Recipient

SKILLS

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