LinkedIn: linkedin.com/in/eagle-yuan-29b953196
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Eagle Yuan

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EXPERIENCES

Northeastern University Computer Architecture Research Laboratory **July 2020 – Present**
Research Assistant *Boston, MA*

- Added new visualization and tool features to MGPUSim, a multi-GPU simulator written in the Go language based on Advanced Micro Device's GCN3 instruction set architecture.
- Contributed to updating MGPUSim to NaviSim, transitioning from AMD's previous GCN architecture to the newer RDNA architecture.
- Gained expertise in parallel computing through simulation development and benchmark testing and analysis.

National Aeronautics and Space Administration **May 2020 – July 2020**
Lucy Space Mission Concept Academy Trainee *Virtual*

- Gathered NASA mission development skills during weekly training from NASA scientists and engineers.
- Collaborated as the lead engineer with other trainee members on designing an interdisciplinary Lucy probe mission related virtually distributed team project.
- Produced a preliminary design review for a new, large payload targeted towards exploring an alternative landing site from NASA's Perseverance Mars Rover site selection.

Northeastern University Sociology and Anthropology Department **September 2019 – May 2020**
Research Assistant *Boston, MA*

- Used a social network approach and data scrapping strategies to study the diffusion of innovative ideas on systemic change and gender equity among NSF ADVANCE grantees and beyond.
- Collected data through access of websites, journals, conference materials and organize data in spreadsheets.
- Handled software programs for statistical, network analysis and visualization such as Python, MATLAB, and R.

Oak Ridge National Laboratory, Center for Nanophase Materials Sciences **June 2018 – May 2019**
Research Intern *Oak Ridge, TN*

- Used Agent-Based Modeling techniques to mimic the collective mechanics of Black Soldier Fly Larvae.
- Implemented a genetic algorithm to calibrate and optimize parameters in the Agent-Based Model.
- Developed and tested the model and presented posters with the collaboration of another intern and a mentor.
- Southern Appalachian Science and Engineering Fair (affiliated regional fair of ISEF) 4th Place award.

EDUCATION

Northeastern University **Expected May 2023**
BS, Major in Computer Engineering and Computer Science , Minor in Mathematics *Boston, MA*

- University Honors College, Honor's Early Research Award Recipient, Dean's List; 3.92 GPA
- Coursework: Discrete Math, Probability and Statistics, Embedded Design, Circuits and Signals
- Activities: Code4Community Mentee, Northeastern Symphony Violinist

Oak Ridge High School **May 2019**
High School Diploma with Honors *Oak Ridge, TN*

- National Honor Society, National AP Scholar; ACT Combined: 35; 4.69 GPA
- Coursework: AP Chemistry (4), Calculus BC (5), Physics C (5 on both), Computer Science A (5), Linear Algebra, Calculus 3, Differential Equations
- Activities: Math Club, Scholars Bowl, Tennessee All State Orchestra Violinist, Varsity Soccer

SKILLS & INTERESTS

- **Skills:** Java, Python, C/C++, MATLAB, HTML, CSS, JavaScript, Go, Scheme, FPGA Prog, Arduino, Verilog, GIT, SolidWorks, AutoCAD, Netlogo, Windows/Mac/Linux OS, Microsoft Office, Soldering
- **Interests:** Math, Robotics, Space Exploration, AI, Physics, High Performance and Quantum Computing