Eugene Ngo

etngo@outlook.com • (425)-553-5355 • LinkedIn • GitHub

Skills

Programming Languages – Java, Python, JavaScript, HTML/CSS, Swift, C, Assembly, SystemVerilog Frameworks & Tools - AWS, PyTorch, Git, React.js, Node.js, OpenCV, Tkinter, CardinalKit, Microsoft Offices **Soft Skills** – Leadership, Teamwork, Verbal & Written Communication, Problem Solving, Quick Learner

Projects

Novo Nordisk ENGINE Capstone: Cognix (GitHub)

- Developed and delivered Cognix, an approach to detecting the presence of Alzheimer's Disease early on in its development to help warn users that may be at higher risk of neurodegenerative diseases.
- Utilized ML and AI to analyze user health data and advises users to seek further medical consultation.
- Led the development of the biomarker visualization by querying user's health data to use as input into our machine learning model and displaying all of the data in a clear, user-friendly format.
- Self-taught Swift and learned to use the CardinalKit framework to design and implement an iOS phone application prototype.
- Conducted user testing with a closed group of individuals to receive user feedback and implement improvements to the app.

RockPaperScissors (GitHub)

- Created an interactive player versus computer game of rock-paper-scissors using pytorch and computer vision via OpenCV for real time hand detection for user input.
- Custom-trained YOLOv5 deep learning model for precise hand gesture detection and classification.
- Collected, cleaned, labeled, and annotated images with LabelImg to build training dataset.

Think Fast (GitHub)

- Developed 'Think Fast,' a Python application utilizing Tkinter to recreate an auto-chess environment for users to enhance their decision-making abilities in high stakes, end game scenarios.
- Designed and implemented Python backend to handle user-specified parameters, interface manipulation, statistical calculations, and data processing.
- Collaborated with the community to gather feedback, iteratively improving 'Think Fast' based on user suggestions and improving the overall user experience.

Experience & Research

Chief Operating Officer @ Stealth

- Aug. 2023 Apr. 2024 Assembled a dynamic and visually appealing static website from scratch using HTML, CSS, and JavaScript, resulting in a user-friendly and responsive web presence.
- Developed embedded systems architecture for the prototype device, ensuring efficient operation and seamless integration of hardware components.
- Constructed a business pitch highlighting the startup's value proposition, market potential, and growth strategy securing \$20,000 in funding for initial operations and expansion.

Sensors, Energy, and Automation Laboratory: SINEW Mask

- Mask Integration & Experimentation Team Lead
 - Created a prototype of a novel non-contact mask that filters pathogens, specifically targeting Coronavirus 2019 and was recognized by NIOSH, NIST, and NSF.
 - Managed and mentored a team of students to improve the efficiency of the mask achieving over 90% filtration of particles larger than 0.5 microns.
 - Organized meetings with stakeholders to report research and development progress.

Education

University of Washington, Seattle WA Jun. 2024 - Present Master's in Information Management: Specialized in Data Science and Project Management University of Washington, Seattle WA Sep. 2019 – Jun. 2023

Electrical & Computer Engineering: Concentration in Embedded Systems

Jan. 2023 - Feb. 2023

Jan. 2022 – Jan. 2023

Apr. 2024

Jan. 2023 - Jun. 2023