Mercy Doan

mercy.doan@queensu.ca | linkedin.com/in/merd/ | github.com/sunyshore

Education

Queen's University, Bachelor of Computing (Honors) Sep. 2020 – Apr. 2024
Specialization in Computing/Mathematics, focus in Data Analytics/Statistics (2x Dean's Honor List) *Kingston, ON*
Areas of Study: Data Analysis, AI/ML/Information Theory, Software Security, Data Structures, Algorithms

Technical Skills

Languages: Java, Python, MATLAB, R, HTML/CSS, Bash, C, JavaScript, Haskell
Frameworks/Technologies: React, Node.js, Bootstrap, WordPress, Git/GitHub, Figma
Libraries: Pandas, NumPy, HuggingFace, SciKitLearn, TensorFlow, Keras, PyTorch

Experience

NLP Project Manager May 2022 – Present
QMIND (Queen's University AI/ML Design Team) *Kingston, ON*
- Led a team of 4 to build a Transformers model that detects security vulnerabilities in code files
- Educated students on a variety of NLP techniques (Supervised/Unsupervised Regression/Classification, statistical models, Ensemble methods, Deep Learning, LSTMs, Transformers), GitHub, and HuggingFace libraries

Vice-President of Operations May 2021 – Present
COMPSA (Queen's Computing Students' Association) *Kingston, ON*
- Led a team of 50+ students to support and enhance the undergraduate Computing student body's experience in Academics, Equity, Events, Marketing, and Professional Development
- Created new initiatives to boost student engagement, develop an internal foundation of long term goals/plans, and advocate for student issues
- As UI/UX Team Lead, communicated with stakeholders, designers, and developers to build a new full-stack application for 1200+ students using AWS, React, Next.js, and Figma

Cybersecurity Researcher May 2022 – Sep. 2022
Google ExploreCSR *Kingston, ON*
- Analyzed and applied research papers on autonomous vehicle security, software development life cycles, vulnerability detection, and machine learning techniques used in cybersecurity
- Proposed new ways to improve an autonomous vehicle software security and development method by using machine learning techniques for prioritizing vulnerability metrics

Co-President Mar. 2022 – Present
QLANG (Queen's Languages and Linguistics Club) *Kingston, ON*
- Founded the first Languages and Linguistics Club at Queen's University
- Led a team of 4 directors to organize weekly educational events for 60+ members

Computing and Math Teaching Assistant Sep. 2021 – Present
Queen's School of Computing, Queen's Mathematics and Statistics Department *Kingston, ON*
- Provided office hours and feedback on Python and Java assignments for 50+ undergraduate students on a weekly basis, and debugged code with concepts up to recursion, tkinter, machine learning principles, OOP, etc.
- Dicussed interesting math puzzles weekly with first year students to foster an engaging and creative environment

Projects

Data Analytics Projects | *MATLAB* Jan. 2022 – Apr. 2022
- Reported on 7 data analytics projects, such as predicting commodity costs and clustering fruit cultivars
- Implemented data analysis methods such as PCA, LDA, dimensionality reduction, and artificial neural networks
- Used tests to check efficiency of analyses, such as AUC/ROC curves and confusion matrices

Beacon | *Figma, Bootstrap, Javascript, Google Maps API* Nov. 2020
- Built a website in a team of 4 that helps users find local mental health support and resources
- Created the frontend to display mental health services based on a mental assessment and the user's location