Trang Ngo

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EDUCATION

Khoury College of Computer Sciences, Northeastern University, Boston, MA   September 2022 – Present
MSc in Computer Science Candidate, **GPA:** 4.0/4.0   *Expected Graduation: December 2024*

Tufts University, Medford, MA   September 2015 – May 2019
BSc in Chemical Engineering, summa cum laude, **GPA:** 3.95/4.0

Relevant Coursework: Computer Systems, Data Structures and Algorithms, Object Oriented Programming, Artificial Intelligence, Mathematical Modelling, Linear Algebra, Programming in C++, Computing for Engineering with MATLAB
Awards: Audrey Butvay Gruss Science Award, Karno Dean's Award, Tau Beta Pi Scholars, Prize Scholarship of 1882

TECHNICAL SKILLS

Programming Languages: Java, C++/C, Python, CSS, HTML, JavaScript, TypeScript, SQL, MATLAB
Technologies: React.js, Redux, Bootstrap, Node.js, Express.js, MongoDB, MySQL, Spring, AWS CDK, jQuery
Tools: Git/GitHub, Linux, Docker, Shell, Figma, Airtable, Tableau, Slack, Mayhem, Microsoft Office, LabVIEW

PROJECTS

Five-in-a-Row Game Web App
A full-stack web application enabling users to register and play Five-in-a-Row against other players or an AI opponent
- Created a three-tier application using React.js (client), JavaScript, Spring Boot (server), and MongoDB (database)
- Developed RESTful APIs and utilized WebSocket for multi-player functionality, user service, and real-time updates
- Implemented game logic and AI player functionality using Java objects on server side

Animated Flip Book Application
- Created a Java-based MVC application with multiple classes (Shape, Color, etc.) to generate simple images using Graphics library and display images as an animated flip book on a Swing GUI
- Wrote extensive JUnit tests for each class to ensure correct functionality

Mayhem Heroes Participant
- Integrated Mayhem, a fuzzing tool to automatically detect software defects, into 15 qualified OSS GitHub projects

WORK EXPERIENCES

Northeastern University Khoury College of Computer Science   January 2023 - Present
Graduate Teaching Assistant for Object Oriented Design   Boston, MA
- Led weekly computer labs for 20+ students and facilitated office hours to teach Object Oriented Design concepts
- Collaborated with instructor and 10 other teaching assistants to manage logistics for course with 100+ students

ZwitterCo, Inc.   May 2019 - July 2022
Chemical Engineer II   Somerville, MA
- Designed and built 2 pilot water treatment systems, with a budget of $20,000, task including: hardware prototyping and assembly, electrical design, and development of a user interface and automation application using LabVIEW
- Worked with the Field Engineering Team to provide technical support, including system commissioning and troubleshooting, training operators, developing internal tools, analyzing data and identifying key findings
- Built 3 in-house lab systems and data acquisition applications to support internal product testing
- Spearheaded the implementation of standard workflows and project management tools for laboratory processes, reducing operational errors and improving turnaround time by 30%
- Provided training and mentorship, as well as managed projects for 4 co-op students over 3 co-op cycles

E Ink Corporation   June - August 2018
Summer Innovation Intern   Billerica, MA
- Prototyped a new approach to measure moisture content in E Ink devices, reducing test time and cost by 60%
- Programmed PIC microcontrollers using C to record, process waveform data, and measure properties of devices