Trang Tran

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EDUCATION

University of Oklahoma *Norman, OK*

- *B.S., Computer Science – GPA: 3.97/4.0* *Expected 05/2024*
- Relevant Coursework: Linear Algebra, Data Structure, Software Engineering, Machine Learning, Artificial Intelligence, Algorithm Analysis, Operating Systems, Computer Security
- President's Honor Roll List in 2020, 2021, 2022, 2023

WORK EXPERIENCE

Hobby Lobby *Oklahoma City, OK*

Backend Software Developer – Intern, Part-time *05/2023 – Present*

- Developed a CSV file import/export feature, enabling efficient bulk updates of **hundreds to thousands** of products
- Designed and integrated microservices into the company's ECommerce ecosystem
- Wrote Spring Boot microservices and APIs to fulfill business needs, including tax-exempt application, Algolia indexing and search functionality
- Refactored code for wishlist management and email notifications microservices, enhancing overall system
- Troubleshot and resolved bugs to ensure system stability and overall performance enhancement
- Technology using: Java, Spring Boot, AWS, MySQL, Algolia, Microservices, RESTful API

University of Oklahoma – Three Sigma Lab *Norman, OK*

Undergraduate Researcher – Part-time *05/2023 – 05/2024*

- Processed and analyzed fMRI, EEG data using Python and various packages to validate hypothesis and uncovering new insights including prediction of brain's high-order functional connectivity and energy landscapes to yield a better prognostic marker for treatment planning of brain tumor patients
- Applied statistical techniques and machine learning to identify meaningful patterns and correlations within the fMRI and brain tumor data
- Technology used: Python, PsychoPy, NumPy, Pandas

Center for Earth Observation and Modeling (CEOM) *Norman, OK*

Software Developer (Part-time) *09/2022 – 12/2023*

- Worked with a team of three to extend existing collecting data features and maintain the website serving **5000+** users
- Designed and implemented searching, downloading, and uploading geographical data and photo features to enhance user satisfaction, resulting in **1000+** new registrations in a year
- Developed a Global Geo-Referenced Field Photo Library, allowing users to easily share, visualize, and analyze geo-referenced photos from various locations
- Technology used: HTML, CSS, JavaScript, jQuery, Python, Django, Docker, PostgreSQL

University of Oklahoma – Freshmen Engineering Project Experience Course *Norman, OK*

Teaching Assistant – Part-time *09/2022 – 12/2022*

- Assisted the professor with creating and delivering lectures in engineering and computer science field
- Hosted office hours to provide guidance to students, resulting in **80%** of students achieving a grade of B or above
- Facilitated hands-on learning opportunities to enhance students' understanding of the engineering design process and computer science principles

PROJECTS

RoboClinician – Hacklahoma 2024 Project *02/2024*

- Collaborated with a team of three to develop an AI-powered medical query platform for medical practitioners, clinicians, and students, utilizing the 7B version of Meditron from Hugging Face within 24-hour competition
- Implemented user interface with HTML, CSS, and Django, providing confidential and accurate medical responses
- Technology used: Python, Flask, MySQL, Large Language Model (LLM)

Brain Computer Interface (BCI) Game – NeuroFlap *02/2024 – Present*

- Lead a BCI game project involving experimental design, EEG data collection, and processing data
- Apply machine learning techniques to train on the collected data, translating neural signals into actions for interactive gameplay, exemplified through a custom-designed Flappy Bird game
- Technology used: Python, PsychoPy, Machine Learning, OpenBCI, NumPy, Pandas, Scikit-learn

SKILLS

- **Languages:** Python, Java, C++, HTML/CSS, JavaScript, jQuery, SQL
- **Framework:** Django, Flask, Spring Boot, AWS, Bootstrap, GitHub, Docker, MySQL, RESTful API, NumPy

PUBLICATIONS

- T. M. Tran, T. T. Tran, and S. Khanmohammad, "High-Order Resting-State Functional Connectivity is Predictive of Working Memory Decline After Brain Tumor Resection," *2024 46th Annual International Conference of the IEEE Engineering in Medicine & Biology Society (EMBC)*, Orlando, USA, 2024 [Submitted]

LEADERSHIP

Dean Leadership Council *09/2022 – 12/2022*

Mentor

- Mentored a group of 15 freshmen engineering students, answered their questions and assisted students in connecting with the appropriate resources for support
- Introduced various extracurricular activities and student organizations, conducted tours of College of Engineering facilities to enhance students' overall experience.