Emily Tran

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CAREER OBJECTIVE: Software Engineering Internship

EDUCATION

University of California, Irvine

B.S. in Computer Science, prospective **June 2026**

- Dean's List 2022, 2023, 2024
- Regents' Scholarship
- **GPA: 3.92**
- **Relevant Coursework:** Python Programming, Python with Software Libraries, Advanced Python, Programming in C/C++, Data Structures Implementation and Analysis in C++, Machine Learning and Data-Mining, Artificial Intelligence, Database Design and Management (DBMS, SQL), Principles of Operating Systems, Principles in System Design (C, Unix), Computer Organization (Assembly), Software Testing (Java), Analysis, and QA, Linear Algebra, Probability and Stats, Human Computer Interaction

EXPERIENCE

Raytheon Technologies

Engineering Intern | June 2024-September 2024

- Enhanced **Python** and **Anaconda**-based machine learning algorithm to predict F-22 flight module failures; improved code for automatic visualization generation
- Developed **Python** script for module failure detection that filters out false alarms from real failures, generates detailed Excel reports with removed entries
- Worked with DevOps tools including **Jira**, **OneNote**, and **Confluence**; gained proficiency in **Jenkins**, **Jira**, and **Bitbucket**
- Updated and created Jenkins nodes for lab PCs, automated Jenkins scripts and enhanced user input interface

Engineering Intern | June 2023-September 2023

- Created **Web APIs** and **ASP.NET** web forms to access and update data via Microsoft Entity Framework using **Visual Studio** for the F-22 Program Web Database applications; written using **C#**, **JavaScript**, **SQL**, and **HTML**
- Automated executable shell scripts and emailed results and log files to users using **Jenkins**, **Jira**, and **Agile**
- Debugged and updated F-22 Infrastructure Databases on **Microsoft Access** and **Visual Studio**
- Performed tests on various F-22 hardware modules using Common Automated Test Stations and other test stations

UCI - University Neurocognitive Imaging (UNI)

Undergraduate Student Researcher | April 2024-Present

- Applied Area Under the Curve (AUC) Receiver Operator Characteristic (ROC) analysis using **MATLAB** to evaluate combinations of different thresholds to discriminate between normal controls and brain-injured patients
- Performed statistical analysis on brain injury data using previously built Statistical Parametric Mapping (SPM) algorithms
- Worked with **Python**, **Jupyter Notebook**, and **Anaconda** to conduct leave-one-out analysis and generate images

PROJECTS

Fashion-MNIST Classifiers | March 2024

- Developed a **Python**-based machine learning project to categorize types of clothing from images in the Fashion-MNIST dataset, containing 70,000 grayscale images of 10 apparel categories
- Implemented in Python with **Anaconda** libraries including **TensorFlow/Keras** for deep learning models, **NumPy** for data handling, and **Matplotlib** for visualization
- Assessed the performance of k-nearest neighbors, logistic regression, feedforward neural network, and convolutional neural network classifiers for image-based clothing categorization

IrvineHacks | January 2024

- Led a team in developing a website on **GitHub** with a generative algorithm to create personalized travel itineraries based on users' budgets, destinations, and lengths of stay
- Used **HTML**, **CSS**, and **Figma** for front-end development to prototype and design user interface
- Developed generative algorithm in **Python** and implemented **TypeScript**, **Next**.js, and **React** for back-end data management

TECHNICAL SKILLS

Programming Languages: C/C++, Python, C#, MIPS Assembly, Java, SQL
Operating Systems: Mac, Windows, Unix
Software: Visual Studio, PyCharm, Figma, R, Eclipse, MARS