Randall Williams

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EDUCATION

University of Southern California, Viterbi School of Engineering   December 2021
Bachelor of Science in Computer Science and Business Administration
GPA: 3.42
Relevant Coursework: Data Structures & Object-Oriented Design, Discrete Math, Algorithms, Software Engineering, Business Statistics, Artificial Intelligence, Machine Learning

WORK EXPERIENCE

Air Force Research Laboratory – Software Engineering Intern   Jun 2021 – Aug 2021
Colorado Springs, CO
- Appointed Scrum Master for a 12-person team, facilitating sprint planning, grooming, standup, etc.
- Decreased orbital calculation upload time by 20x, from 5 minutes to 15s, by automating API requests.
- Simplified office electronic cataloging by building a hardware management tracking system with Flask.
- Assisted in the backend of a mission management syncing service (Java Spring Boot and Kafka)

USC Viterbi School of Engineering – Software Teaching Assistant   Aug 2020 – May 2021
Remote
- Course Producer (undergraduate TA) for CSCI 201: Principles of Software Development (Java).
- Held office hours and developed coursework for 200+ students.
- Graded labs and programming assignments.

US Department of Defense – Software Engineering Intern   Jun 2020 – Sep 2020
Remote
- Created a Unity application for Marine Corps Air Station Miramar that replays training data in a 3D environment for mission debriefing.
- Designed desktop standalone that inputs GPS and weapon orientation data to be simulated with the Google Maps API and C#.
- Developed a proprietary time-syncing file management tool in Python.

RECENT PROJECTS

Inventory Management System   2021
- Built a full stack web application to track office supplies, using Flask, Bootstrap, Ajax/JQuery and SQLite
- Accounts are salted and hashed with SHA-256
- Inventory display features live updates, using asynchronous polling

Stock Portfolio Dashboard   2020
- Built a portfolio management and tracking application
- Implemented asynchronous API request polling for live feed market updates.
- Salted and hashed accounts along with portfolios are stored on Firebase.
- Wrote JUnit and Selenium testing scripts for black and white box testing.

Instagram Spam Detector   2020
- Predicts with up to 90.33% accuracy whether an Instagram account is spam or not, via Kaggle datasets.
- Implemented a naive Bayes classifier written in Python, optimized with Laplace smoothing and Gaussian distribution for continuous features.

SKILLS & INTERESTS

Languages: Python, Java (proficient), Javascript, SQL, noSQL
Frameworks/technologies: Flask, Bootstrap, Firebase, Heroku, NumPy, scikit-learn, pandas,
Interests: Theology, Philosophy,, Powerlifting, Space Exploration, Hiking
Organizations: USC Reach, Trojan Barbell Club