(650)8884067
rw15006@usc.edu

Randall Williams

https://github.com/rgw17
https://randallwilliams.cloud/
US Citizen | Eagle Scout

Education

Los Angeles, CA	**University of Southern California**	December 2021

• B.S. Computer Science and Business Administration, Junior.

Coursework: Data Structures, Object-Oriented Programming, Algorithms, Software Engineering, Artificial Intelligence, Discrete Math, Business Statistics.

Experience

Software Teaching Assistant	**USC Viterbi School of Engineering**	Aug 2020 – Present

Los Angeles, CA

• Course Producer (undergraduate TA) for CSCI 201: Principles of Software Development (Java).

• Hold office hours and develop coursework for 200+ students.

• Grade labs and programming assignments.

Software Engineer, Intern	**US Department of Defense**	Jun 2020 – Sep 2020

Remote

• Employed by the National Security Innovation Network for the X-Force Fellowship program.

• 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.

Projects

Synthetic Dataset Generator (ongoing) **Python, Sklearn, Pandas, Unity**

• Building a tool to generate and automatically tag large, diverse training datasets for machine learning inference.

• Reduces cost and increases speed of ML algorithm development where available ground-truth training data does not cover the full range of conditions the ML agent will encounter.

Instagram Spam Detector   **Python, Numpy**

• Predicts with up to 90.33% accuracy whether an Instagram account is spam or not, learning from Kaggle datasets.

• Implemented a Naïve Bayes classifier, optimized with Laplace smoothing and gaussian distribution for continuous features.

Stock Portfolio Manager   **HTML/CSS, Bootstrap, Javascript, Java, Firebase**

• Built a portfolio management and tracking application. Part of CSCI 310 group project.

• Recent stock information retrieved from APIs for continual updates and analysis.

• Created JUnit and Selenium testing scripts for black and white box testing.

Skills

Languages: Python, Java, C#, JavaScript, SQL, noSQL

Frameworks/libraries: Scikit-learn, Pandas, Numpy, JUnit, Mockito, Servlets

Technologies: Firebase, Google Cloud Platform, Amazon Web Services, Unity, Git, Agile development