Justin Stitt

jstitt007@gmail.com github.com/JustinStitt Orange County, CA

EDUCATION

B.S. Computer Science **Graduation Date:** May 2023
California State University, Fullerton **GPA: 3.6**

WORK EXPERIENCE

GOOGLE | SWE Intern | Mountain View, CA **May 2022 – Aug 2022**

- Contribute patches to the **Linux Kernel** to further enable Clang/LLVM build support while decoupling Google assets from GCC
- **Improve LLVM build times by 2.1%** through profiling and optimization efforts ultimately reducing build costs for Google

GOOGLE | STEP Intern | Remote **May 2021 – Aug 2021**

- Perform analysis on internal data to determine its usefulness within a **binary classifier** feature space using **SQL** and **Python**
- Preprocess, slice, and organize data for use as input and labeling features using **Pandas** and **NumPy**
- Improve advertiser experience and secure revenue for Google by automating the appeals prediction process
- Utilize **TensorFlow** to design, train, and evaluate a neural network's performance across various metrics

CALIFORNIA STATE UNIVERSITY, FULLERTON | Supplemental Instructor **Jan 2020 – Present**

- Communicate complex topics regarding **C++** and **data structures** to students with varying levels of understanding
- Prepare engaging study sessions and materials ultimately **boosting student's grades by 10%**

PROJECTS

TUFFYHACKS 2021 & 2022 WINNER: BEST OVERALL | 24 Hour Hackathon **March 2021, March 2022**

Conscious Camper (2021): A sustainability passion project completed in under 24 hours!

- Implement Google's Places API, OpenWeather API, and a machine learning model to evaluate potential campsites

Crypto Clicker (2022): An interactive experience demonstrating the strain that cryptocurrency has on our planet

- Procedurally generate decaying planet model due to the thinning atmosphere caused by Bitcoin mining

X3D PARSER | Parses XML-like files for use in Ray Tracing **Apr 2022**

- Generate mesh geometry data from Blender-exported x3d files using triangle vertices
- Configure import/render workflow for newly-generated mesh files into a QT-enabled **C++** Ray Tracer

SOCIAL DISTANCING SIM | A Simulation of How Social Distancing "Flattens the Curve" **May 2020**

- Design a physics-based simulation in **Python** that correlates collisions to real-time infections. Simulation allows the modification of a "social distancing ratio" which corresponds to the percentage of people staying at home
- My findings show that it takes just under 300 days for all subjects to become infected with a 10% social distancing ratio and around 1,000 days with a 70% social distancing ratio

PHILOSOPHY AI | Generate New Never-Before-Seen Philosophical Quotes **Oct 2020**

- Scrape **XML** and **HTML** web data using **Python** to build a philosophical corpus
- Use a **Markov Chain** to generate new philosophical quotes and post them to Instagram overtop a nature-themed image

OPENAI GYM | Develop Machine Learning Models to Compete in OpenAI's Gym Environment **Oct 2020**

- Study **Deep Learning** and develop competent ML models to play classic Atari Games like Breakout and Lunar Lander
- Implement Convolutional Neural Networks and Genetic Feed-Forward networks with **TensorFlow**, **PyTorch** and **Flux.jl**

LEADERSHIP

ASSOCIATION FOR COMPUTING MACHINERY (ACM) | Artificial Intelligence President **Aug 2022 – Present**

- Lead workshops in **accessible Artificial Intelligence** alongside engaging and informative content

INTERNATIONAL COLLEGIATE PROGRAMMING CONTEST (ICPC) | Team Lead **Feb 2022**

- Prepare and organize team notes and strategies for various complex algorithms

SKILLS

Languages: Python, C/C++, Julia, Ruby, Java, Go, JavaScript, C#

Machine Learning: TensorFlow, PyTorch, OpenAI Gym

Web Development: Svelte, React, Flask, Django, RubyOnRails

Technology: Git, Shell, CI/CD, AWS, LaTeX, Googling