Justin Stitt

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 groups with varying levels of understanding
- Prepare engaging study sessions and materials in accordance with lecture topics

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

May 2020

- 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" that corresponds to the number 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.

OPENAL GYM | Develop Machine Learning Models to Compete in OpenAI's Gym Environment

- 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.il

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, OpenAl Gym

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

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