ETHAN DOMINGO

Los Angeles, CA

github.com/Eddysunday012

Education

UC Santa Cruz Sep. 2019 - March 2023

Bachelor of Science (B.S.) in Computer Science with a Minor in Statistics Santa Cruz, CA

GPA: 3.70

Work Experience

Student Assistant Programmer | California Department of Transportation

July 2021 - July 2023

- Enhanced data input efficiency for a team of 30 Senior Civil Engineers by implementing automation scripts in Microsoft's VBA programming language, streamlining processes up by 50% and optimizing dozens of Excel Sheets
- Edited and Quantity checked Senior Engineer's Excel Sheets and uploaded them to a SharePoint file server for other Engineers to utilize
- Revamped and restructured a database file storage system for an entire District comprised of 80 engineers using Microsoft Access and Microsoft VBA

Undergraduate Data Science Assistant | UCSC Astrophysics Department

June 2022 - Sept. 2022

- Worked with a team of 10 Astrophysics Researchers to analyze Fast Radio Burst (FRB) data recorded from the UC's multi-billion dollar telescopes
- Forked and pushed to a Python-based Github Respository used by Astrophysics Researchers to analyze FRB Data using Monte Carlo Markov Chains and Spline Interpolations
- Created a comprehensive time-profiling analysis to meticulously identify and optimize bottlenecks within the main code base, resulting in an a 5x speedup and saving 8 hours in the overall data processing time performed by the code
- Developed a robust understanding of advanced statistics and astrophysics concepts utilized in an extensive GitHub repository comprising over 8000 lines of code within a three-month period, despite having a background solely in computer science

Projects

Sentiment Analysis Model | Natural-Language-Processing Machine Learning Model

October 2023

- Developed a sentiment analysis model capable of classifying text into positive, negative, or neutral categories
- Achieved an accuracy rating of 92.3% on a kaggle dataset that contains different texts from Twitter
- Built using Python, Jupyter Notebooks, Tensorflow, and Scikit-learn

Spotify Data Visualizer | Data Visualizer Web Application

September 2023

- Created a Spotify data visualizer web app that pulls user data from Spotify's Web API and displays insights such as top tracks and genre distribution
- Built using React, Typescript, Turborepo, Next.js, NextAuth.js, Vite, and Vitest

ethandomingo.com | Personal Portfolio website

February 2023

- A personal portfolio website to display my resume, background, and personal projects
- Built using React, Javascript, Turborepo, Vite, Vitest, and Material-UI and fully deployed online with Vercel

ASL Gesture Recognition Model | Computer Vision Machine Learning Model

February 2021

- Created a machine learning model that classifies different images of ASL hand gestures to their respective letter on the English alphabet.
- Achieved an accuracy rating of 95.7% amongst a test size of 108 unique images.
- Built using Python, Jupyter Notebooks, Tensorflow, and Scikit-learn

COVID-19 Chatbot | Python-embedded Chat Bot

March 2020

- Participated in UCLA's annual LA HACKS Hackathon and developed an automated COVID-19 Chatbot catered to the elderly
- Programmed entirely with Python and utilized Twilio's automated phone communication API
- Developed by a team of 3 individuals over the course of a single weekend

Leadership and Extracurriculars

Filipino Student Association

Spring 2020 - June 2023

Lead Coordinator and Head Chair

 $UC\ Santa\ Cruz$

LA Hackathon 2020

Spring 2020

Participant and Developer

UCLA