BENJAMIN YI

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EDUCATION

University of Maryland - College Park   September 2018 - May 2022

Major in Computer Science - Data Science, Minor in Technology Entrepreneurship

Coursework Object-Oriented Programming I & II, Organization of Programming Languages, Linear Algebra, Data Science, Computer Systems, Algorithms, Design and Analysis of Computer Algorithms, Applied Probability and Statistics, Data Modeling in Business, Discrete Structures, Microeconomics, Ethics of Engineering

WORK EXPERIENCE

Marathon Building Services   March 2020 - Present

Data Scientist

· Concurrently update project and management information to determine optimal pathing route for PMs.
· Review logistic data on prior job sites to budget upcoming projects, increasing profit levels by 10% per project.
· Assign and oversee the daily tasks of a team of summer interns, ensuring all teammates are working efficiently.

Department of Computer Science - University of Maryland   September 2019 - September 2020

Peer Advisor

· Inform and guide students towards available academic resources within the school of Computer Science.
· Respond to e-mails, blog posts, and phone calls that students have as day-to-day operations.
· Ensure smooth check-in for hundreds of students a day to meet with their assigned advisors.

Human-Computer Interaction Lab - University of Maryland   June 2019 - September 2019

Research Developer

· Supported development efforts to create virtual environments in the Unity game engine for patients with dementia.
· Aided in integrating multi-user compatibility to a Unity application using Photon networking.
· Worked alongside development team to develop a multi-user garden environment, using Blender 3D modeling.

PROJECTS

Crypto Trading Bot (Python - Flask)   https://github.com/bencyi/crypto-bot

· Uses Binance websocket streams to display live candlestick data of chosen crypto using lightweight charts.
· Developed backend of the bot using flask framework, allowing user input to determine technical analysis strategies.
· Uses Binance API to place market orders and access account balances to display to web UI.

Alcohol Consumption and Academic Performance   https://github.com/bencyi/ACaAP
(Python - Pandas, Numpy, Matplotlib)

· Used pandas to scrape data from a csv file and format into a DataFrame object to display relevant information.
· Used matplotlib to create bar graphs, scatter plots, and violin plots that visualized data for our viewers.
· Ran a linear regression between students' grades and alcohol consumption using sklearn and statsmodels.

Gardening App (Unity, C#)   https://github.com/bencyi/Multi-User-Cross-Platform-App

· Users on either PC or Oculus Quest can interact in a garden-like environment made in Unity.
· Multi-user capability implemented using Photon server hosting and Photon Unity Networking.
· C# scripts written to detect user's device, as well as to allow PC, Mac, and Oculus Quest integration.

TECHNICAL STRENGTHS

Languages	Python, Java, C, HTML/CSS/JavaScript, Ruby, OCaml
Software & Tools	React, Flask, Git, SQL, Unity, Visual Studio