Derek Li

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EDUCATION

UNIVERSITY OF ILLINOIS AT URBANA-CHAMPAIGN
B.S. in Computer Science and Mathematics
📅 Expected May 2022 | 📍 Urbana, IL
GPA: 3.94

LONDON SCHOOL OF ECONOMICS
Study Abroad
📅 Summer 2018 | 📍 London, UK

HILLSBOROUGH HIGH SCHOOL
📅 Grad. May 2017 | 📍 Hillsborough, NJ
GPA 4.2

COURSEWORK

UNDERGRADUATE
Data Structures and Algorithms
Computer Architecture
Fundamentals of Mathematics
Software Design Studio
Discrete Structures

SKILLS

PROGRAMMING
Python:
C++:
Java:
Swift:
HTML/CSS:

Tools I love:
Vim • Git • Bash • tmux • Xcode

ADDITIONAL INFORMATION

Honors:
Dean's List
Bank of America S&T STEM Summit

Activities:
Club Tennis (Fundraising Chair)
Triathlon Team
ACM (SIGNLL)
Asian American Association

Interests:
Running • Golf • Fishing • Audiobooks
Travel • Poker • Films • Table Tennis

PROJECTS

LEARN TO WALK SIMULATION W/GENETIC ALGORITHM
📅 Spring 2019 | </> C++
- Created a simulation where 3 node bodies are trained to walk the furthest distance possible using a genetic algorithm
- Utilized Box2D (physics engine) to contain the world the walkers inhabit and to allow the algorithm to find optimal parameters for walking
- Mapped out a GUI using OpenFrameworks that allows users to train a model, view walker parameters, and see fitness scores

GARBAGE COLLECTOR
📅 Spring 2019 | </> Python
- Developed a tool with a team that identifies trash in an image and sends out alerts once it is detected
- Trained a convolutional neural network on our own dataset using the Keras API
- Integrated into a server that would allow users to send queries to a server running the program and get real time info

STRAVA DATA DASHBOARD
📅 Summer 2019 | </> Python
- Built an application that allows users to compare running performances across multiple distances and see the steps of progression
- Calculate training paces for the athlete based off of the most recent race
- Implemented Flask web server with a SQLite3 database to store athlete information

STOCK DATA ANALYSIS TOOL
📅 Fall 2017 | </> Python
- Offered functionality to customize portfolios based on key ratios and historical trends to forecast future stock prices
- Designed a GUI using Tkinter to build an intuitive and easy-to-understand stock market application performance
- Researched existing solutions for teaching novice investors about the stock market and identified weaknesses

EXPERIENCE

BRIGHTECH INTERNATIONAL | Software Engineering Intern
📅 June 2019 - August 2019 | 📍 Somerset, NJ
- Completed statistical analysis using SAS in order to process clinical trial data for the FDA
- Verified quality of software modules that doctors use to enter classified data

EXEQ INC. | Business Administration Intern
📅 July 2017 - August 2017 | 📍 New York, NY
- Assisted in launch of a mobile app that analyzed spending habits for millennials and offered recommendations
- Developed database of merchants in the New York City area to better identify trends in data
- Coordinated marketing efforts to develop a 30,000+ customer waitlist prior to the release date