Harjot Singh

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Education

University of California, Davis

Bachelor of Science, Computer Science, Major GPA: 3.9, June 2022

Awards

Dean's Honor List Fall 2018, Winter/Spring/Fall 2019, Winter 2020

Relevant Coursework

Object-OrientedData StructuresComputer ArchitectureDiscrete MathTheory of ComputationIntro to Artificial IntelligenceMachine ProgrammingAlgorithm Design & AnalysisProbability and Statistics

Projects

Connect 4

July/2020 - September/2020

- Developed Connect 4 with Javascript where users play against one another using the same computer.
- Implemented the Minimax algorithm to construct an artificial intelligence that looks four moves ahead which users can play against.
- Designed a server with Node.JS, Express, and Socket.IO allowing clients the ability to play with others online.
- Deployed a playable version of the application using Git and Heroku, a cloud service platform used to host web applications.

Product Weight Web Scraper

June/2020-July/2020

- Programmed web scraping application using Python's HTML requests library and Beautiful Soup, Python framework for parsing HTML documents.
- Retrieved product's universal product code (UPC) from a comma-separated values file (CSV) of 6000+ items.
- Performed HTML GET requests using each UPC to *digit-eyes.com*, a product information database, and extracted the product's weight using Beautiful Soup.

Discord Chat Bot

Dec/2018-Jan/2019

- Developed that bot for communication software, Discord, using discord.py, a Python Discord API wrapper.
- Synthesized chat bot with Riot Games' public API to make HTTP requests to fetch statistics regarding a user's League of Legends account.
- Programmed the bot to display statistics for a particular League of Legends account on user query.