Raffaele Mannarelli

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Technical Skills

Languages: Java, Python, C, Rust, Assembly, Swift, JavaScript, HTML, SQL, R, Ruby, OCaml
Frameworks/Libraries: Pandas, React, Docker, Pytorch, SKlearn, CatBoost, BeautifulSoup
Developer Tools: Git, Github, XCode, PyCharm, MATLAB, VScode, Twilio, Jupyter

Education

University of Maryland - College Park Aug. 2020 – Dec 2023
B.S. Computer Science - B.S. Mathematics *College Park, MD*
GPA: 3.52/4.00

Relevant Coursework: Computer Systems, Object-Oriented Programming, Computer Vision, Algorithms, Topics in Data Science, Discrete Structures, Organization of Programming Languages

Experience

U.S Food and Drug Administration Jan 2022 - August 2022
Software Engineer Intern *Silver Spring, MD*

- Built a web scraper with Selenium and BeautifulSoup in Python to pull data from dynamic web pages. Data was then written to and organized on a CSV file using pandas and Matplotlib
- Built a machine learning model using CatBoost in order to predict whether or not an organization was a medical gas company, with 75 percent accuracy
- Utilized various data visualization modules in Python and Tableau to help build a case study for a potential rule

University of Maryland - College of Computer, Mathematical, and Science Aug. 2022 – Present
Teaching Assistant (CMSC216: Computer Systems) *College Park, MD*

- Lead discussions teaching the fundamental concepts of how operating system virtualizes the hardware to provide basic services and abstractions to enable a user program to effectively use the available hardware resources
- Grade hundreds of projects and exams weekly for style and accuracy
- Held weekly office hours and study sessions for students, helping answer questions and guiding them on projects

University of Maryland - College of Behavioral and Social Sciences Feb. 2021 – May 2021
Teaching Assistant (ECON330: Money and Banking) *College Park, MD*

- Teacher assistant for an upper level economics course on the structure of financial institutions and their role in the provision of money and near money
- Lead classes of up to 300 students
- Held weekly office hours and personal tutoring sessions

Projects

Shellito | *C*

- Created a shell that would take both Unix/Linux commands and custom shell commands
- Commands are parsed and organized using an abstract syntax tree, which organized both the commands and file I/O redirection prompts
- Shelling techniques involved duplicating file descriptors for file redirections, anonymous piping, multi-processing (parent-child relationship), and subshells

DnB scraper | RaffaeleMannarelli/Scrape

- Developed a webscraper to pull data on various industry profiles
- Utilized Selenium to launch a Chrome Driver in order to process Javascript / pull HTML from dynamic website
- Parsed the HTML using the BeautifulSoup library, and then organized into a Pandas data frame