Gabriel Paulos

Software Engineering Student

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Education

University of Toronto *Expected Graduation: May 2022*

BASc in Computer Engineering, minor in Artificial Intelligence *Toronto, Canada*

- Focus in: Software, Computer Networks, Artificial Intelligence
- Relevant Coursework: Algorithms & Data Structures, Software Design & Communication, Applied Fundamentals of Machine Learning, Operating Systems
- Awards: $ 2000 Lassonde Scholarship (2018)

Skills & Interests

Programming Python, C/C++, Javascript
Frameworks Flask, Bootstrap, HTML5/CSS/Javascript, Node.js, NumPy, PyTorch
Languages English, Portuguese

Work Experience

Depactor *May 2020 - September 2020*

Co-Founder & Software Engineer *Toronto, Canada*

- Co-founded a cybersecurity start up applying a machine learning model to prevent Business Email Compromise.
- Developed and deployed a functioning binary classification machine learning model using scikit-learn, Pandas, and NumPy to attribute authorship of corporate emails with an 86% accuracy.
- Processed and transformed the Enron Email Corpus, containing over 500 000 emails, into 21 unique numerical features using academic literature in linguistic analysis.
- Created a data scraper to scan through the Enron email corpus, using BeautifulSoup and Python, and properly format and clean the emails in order to input them into our predictive machine learning model.

Projects

TourMap: Geographic Information System *Jan. 2020 - May 2020*

Github

- Developed a Geographic Information System, using C++, where the user is able to view a city's roads and buildings, search for the shortest routes between two addresses and explore points of interests
- Used Dijkstra's Algorithm and A-star Algorithm to find shortest paths between two addresses or intersections, no matter if the user is walking, driving, or combining the two activities

Music for the Weather *September 2020*

Github

- Used Node.js to create a program that interacted with the Spotify API and the OpenWeatherMap API
- Requested the weather of a randomly picked major city in the world from the OpenWeatherMap API and used this information to select a mood playlist from the Spotify API
- Outputs the chosen song and the city randomly selected by the program

Partial Operating System Build *October 2020*

Github

- Completed labs that developed my ability to understand Operating System concepts in C
- Built a multi-threaded system that can perform priority and FIFO scheduling
- Used POSIX system calls to create a server and client program that handled multiple requests using worker threads