Pete Smith

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https://www.psmit.dev/ | github.com/psmit703 | linkedin.com/in/petesmith-umd/

Education

University of Maryland, College Park (Aug 2019 – Present)

- Bachelor of Science, Computer Science; Bachelor of Arts, History; Minor, Trumpet Performance
- Diploma Expected Dec 2024
- Cumulative GPA: 3.356 (Aug 2023)
- Relevant Coursework: CMSC430 – Intro to Compilers; CMSC421 – Intro to AI; CMSC420 – Advanced Data Structures; CMSC351 – Algorithms
- Member: Multi-Agent Reinforcement Learning Reading Group; History Undergraduate Association

Skills and Attributes

- Languages: Python, Java, C, Rust, Ruby, OCaml, Racket, HTML, CSS, JavaScript, SQL
- Frameworks: Bootstrap, jQuery, Plotly.js
- Tools and Environments: UNIX, VS Code, Eclipse IDE
- Coding Skills: Debugging, good code readability, version control
- Other Skills: Written and oral communication, teamwork, critical thinking, customer service

Programming Projects

Personal Website (HTML, CSS, JS) (Personal Project, Jun 2023 – Present)

- Designing a personal website (https://www.psmit.dev/) with focuses on user experience and mobile readiness
- Using JavaScript and GitHub's REST API to implement desired functionalities

Bloom Filter (Python) (CMSC420, Spring 2023, UMD)

- Implemented insert, hash, rebuild, and search functions for a Bloom Filter
- Allows for arbitrary bit array length, number of hash functions, and max false-positive probability
- Automatically rebuilds the Bloom Filter when the false-positive probability is greater than the threshold as determined by a simplified, approximate probability formula

Reinforcement Learning (Python) (CMSC421, Spring 2023, UMD)

- Implemented Value Iteration (batch, async., and prioritized), Q-Learning, Epsilon-Greedy, and Approx. Q-Learning algorithms
- Specified values for Discount, Noise, Living Reward, Epsilon, and Learning Rate for simulations
- From UC Berkeley's CS188 Project 3

Work Experience

Web Development Intern (Univ. of Maryland) (Jun 2023 – Present)

- Creating a comet statistic site for the NASA Planetary Data System Small Bodies Node at UMD
- Designing frontend using HTML, CSS, JS, and various frameworks to create a seamless user experience with desired functionality
- Implementing backend using Python to create an automated script that pulls from multiple databases using HTTP requests and a PostgreSQL Python library