William Callan

https://www.linkedin.com/in/william-callan/ • wacwca.github.io

EDUCATION

University of Maryland — College Park, Maryland
Bachelor of Science: Computer Science — May 2023
Minor: Statistics — GPA: 3.781
University Honors College

HONORS AND AWARDS

President's Scholarship Recipient — 2019-2023
World Cube Association US National Champion — 2019

WORK EXPERIENCE

J.P. Morgan Chase — Wilmington DE
Software Engineering Intern — June 2022-August 2022
- Developed full-stack internal application using Java and React
- Designed and improved features through team feedback and product demos
- Created automated tests for both front-end and backend deployment

Slope.io Inc — Remote
Software Engineering Intern — August 2020-Present
- Automated verification of 100+ documented site workflows using Selenium and Capybara
- Identified and researched issues and bugs that were communicated to the development team
- Optimized Ruby on Rails testing suite for speed and consistency

University of Maryland — College Park, Maryland
Teaching Assistant — August 2020-Present
- Planned and taught lessons for classes of 30+ students, in both virtual and in-person semesters
- Collaborated with other teaching assistants to create additional resources for students

PROJECTS   *Project links:* github.com/WACWCA/

Sked (2020-21)   *Ruby on Rails, HTML, CSS, JavaScript, Web Scraping*
- Website allowing UMD students to create and compare schedules among friends
- Implemented script for web scraping university's schedule of classes to populate platform database
- Constructed backend for maintaining user accounts, schedules, and friend requests using Ruby on Rails

Pac-Man + Maze Generation Algorithm (2020)   *Java, Game Development*
- Pac-Man game featuring traditional items and opponents as well as unlimited levels
- Mazes randomly generated by Tetris-style algorithm that follows traditional board restrictions

Rubik's Cube Algorithm Ranker (2019)   *Java*
- Tool for sorting through candidate algorithms for a particular Rubik's Cube position
- Analyzed currently existing algorithms to construct base model for sorting
- Developed probabilistic algorithm to sorts tens of thousands of algorithms by expected speed

SKILLS

Programming Languages: Ruby, Java, Python, C, JavaScript, HTML/CSS, Dart
Frameworks: Ruby on Rails, React, Flutter, Pandas/NumPy, Springboot

COURSEWORK:

Obj. Oriented Programming I and II, Intro to Computer Systems, Intro to Linear Algebra, Discrete Structures, Intro to Data Science, Organization of Programming Languages, Algorithms, Advanced Data Structures, Intro to AI, Intro to Machine Learning