Michele Bilko

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Education

BOSTON UNIVERSITY (2024-2027) Boston, MA: B.A. in Computer Science and Philosophy, Relevant Coursework: Geometric Algorithms, Concepts of Programming Language, Probability in Computing, Analysis of Algorithms, Software Engineering, Theory of Computation, Full Stack Development, Advanced Algorithms

UNIVERSITY OF CALIFORNIA, SANTA CRUZ (2023-2024) Santa Cruz, CA: B.S. in Computer Science and Philosophy, Relevant Coursework: Programming Abstractions in Python, Computer Systems and C Programming, Applied Discrete Mathematics, Data Structures and Algorithms, Introduction to Machine Learning

BERGEN COUNTY ACADEMIES (2019-2023) Hackensack, NJ High School Diploma, ACT: 35, National Honors Society, National French Honors Society, Girls Who Code, Co-President of Model United Nations, President of Generation Coders

Technical Skills & Projects

High School Senior Year Capstone Project
Developed a website for the school's theater group to organize and manage their costumes and props in a collaborative team setting. Worked with agile and test driven development to create a website using Node.js and version control through GitHub. Utilized Google Sheets as a database and the Google Sheets API along with OAuth to create a secure login system. Designed website using photoshop and implemented with CSS.

Finding Aid for Columbia University's Media Center for Art History
Created a tool using Java, Python, and the pandas library to read and transform data in CSV files for the Media Center's website. Used dynamic programming (recursion + memoization) to optimize runtime, handled edge cases and outliers. Turned over 20,000 lines of unreadable and difficult to parse data into well formatted and readable categories and subcategories for use in the website's search system.

Central Rock Gym Route Tracker
Route tracker created for the Central Rock Gym in Fenway. Users are able to mark off climbs they've completed as well as make accounts and see route progress. Admins of the rock gym can view statistics for route completions and upload/create their own climbs.

Relevant Experience

Columbia University Media Center for Art History — New York, NY
Intern — September 2022 - June 2023
Aided with digitization of the Media Center's 35mm slide and photography collection during the 2023 grant period. Used Photoshop to edit and reformat images and programmed a finding aid to handle large quantities of data for their website and researched information to add metadata to each slide. Helped write grant proposals.

Boston University IT Help Center — Boston, MA
Student Technician — August 2024 – Current
Handled IT issues and aided clients both in person and over the phone. Imaged computers and helped clients with troubleshooting on multiple devices and operating systems. Provide excellent customer service.

Freelance Web Dev — June 2025 – Current
Worked alongside a graphic designer to create websites for clients. Primarily used django and python to create full stack web applications. Effectively worked in a collaborative environment with strict deadlines.

Research

Algorithm Analysis Boston University, September 2025-Current. Independent study under Professor Dora Erdos looking at problems relating to NP hardness in longest path algorithms as well as algorithm development using dynamic programming techniques.