

Samuel Dobson

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EDUCATION

Columbia University

New York, NY

BA - Computer Science | GPA: 3.9

May 2025

Relevant Coursework: Advanced Programming, Artificial Intelligence, Deep Learning, Databases, Data Structures.

CodePath

Sep 2023 - Nov 2023

WEB101: Web Development, IOS101: iOS Development.

WORK EXPERIENCE

Columbia Build Lab (CBL)

New York, NY

Software Engineer

Jan 2024 - Present

- Build seamless mobile and web application with React Native for a fintech startup from the ground up.
- Collaborate with Product Designer to cleanly implement Figma and user-interface design into the product.

Columbia Application Development Initiative

New York, NY

Front-end Web Developer

Oct 2023 - Present

- Construct user-centric web app with React and Node.js for DevFest 2024, Columbia's hosted Hackathon.
- Transform design team's Figma wireframe design into code and vectorized images while maintaining overall styling.
- Upgrade landing page usability through JavaScript front-end solution to page animation problem.

The Princeton Review

Remote, New York, NY

Teacher

Jul 2022 - Dec 2023

- Boosted SAT scores in English and Math sections by on average 150 pts with 10-week instructional program for groups of 25 high school students.
- Developed and taught actionable, step-by-step methods and strategies to optimize learning outcomes.

PROJECTS

Machine Learning Facial Recognition

Nov 2023 - Dec 2023

- Developed 90% accuracy Scipy Python facial recognition algorithm on Labeled Faces in the Wild (LFW) dataset.
- Reduced dataset dimensionality by 98% with linear algebra, Principal Component Analysis (PCA), and eigenvalues.

BARTER Web Application

May 2023 - May 2023

- Built full-stack marketplace web app w/ React, Firebase, and Google Maps API, targeting an 8 million user base.
- Executed four main team goals: 1) task allocation, 2) repository, architectural framework, homepage functionality, 3) incremental feature additions, aesthetics, system complexity, 4) scalability.
- Selected Best Sustainability Winner after demoing to 10 companies and judges at Tech Together Hackathon.

CERTIFICATIONS

Lyft Mobile Engineering Job Simulation on Forage

November 2023

- Engineered and integrated an iOS table view to present records of completed rides, enhancing the app's user interface.
- Implemented map & user permissions with Swift, Core Location, and MapKit, enabling real-time user location in app.

LEADERSHIP AND EXTRACURRICULARS

Columbia Feminist Coalition

New York, NY

Facilitator

Oct 2022 - May 2023

- Led & facilitated meetings; researched community concerns in Morningside Heights and Harlem.
- Organized events and research hours that produced impact and good for the community.

Democratic National Committee

Remote

Convention Delegate, Youth National Vice Chair

Jun 2020 - Jun 2021

- Increased state membership by 400% + 8 new chapters via 45-state database & developed 6 comprehensive guides.
- Presented to 10,000 person audience at convention and worked to strategize resource allocation.

SKILLS

Languages: Java, Python, C, C++, JavaScript, Typescript, HTML, CSS, Swift.

Fundamentals: OOP, Structures/Algorithms, Unix/Linux, Web Development, Mobile Apps, Version Control & Git.

Data and Python: Tableau, Matplotlib, NumPy, Pandas, PyTorch, Scipy, and Machine Learning.