Dawit (Dave) Boku

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EDUCATION

Colby College, Waterville, ME

Major in Computer Science, with a Concentration in Al **GPA:** 3.77

Minor in Mathematics

Organizations: ColorStack, CodePath, DavisAl Institute, DavisAl Advisory Board, Colby Hackers

Relevant Coursework: Object-Oriented Programming, Data Structures & Algorithms, Linear Algebra, Discrete

Mathematics, Data Analysis and Visualization, Introduction to NLP, Computer Systems

TECHNICAL SKILLS

Programming Languages: Python, Java, Javascript, PHP, Typescript, Tailwind, HTML, CSS

Frameworks and Tools: Node.js, React/Next.js, Flask/Django, Selenium, Git, AWS, PostgreSQL, MySQL

WORK EXPERIENCE

Summer Research Assistant, Colby College, Waterville, ME

June 2024 - Present

Graduation Date: May 2026

- Collaborated with a teammate, to develop a database search system for a database with 100+ entries across 10+ educational and research institutions for the Coast-Cow-Consumer (C3) Project
- Increased efficiency of data analysis and exploration by more than 50% by implementing advanced search and filtering methods specific to the C³ research
- Led the redesign and development of the C³ data repository webpage, improving the User Experience and Interface by creating better visual hierarchies, clearer wording and CTAs, and introducing a modern UI

Software Developer, Davis Institute for AI, Colby College, Waterville, ME

September 2023 - Present

- Designed and developed a chatbot playground interface with React, Flask, and PostgreSQL, enabling more than 10 faculty and students to access more than 10 Large Language Models, with full multimodal support for applicable LLMs
- Reduced the burden of managing multiple accounts by more than 80% and enhanced data accessibility, data supervision, and management efficiency for DavisAI and Colby College

Al Technology and Policy Intern, USAID, Washington, D.C.

January 2024 - February 2024

- Wrote a white paper on the practical implementation of Responsible AI within a governmental context, that was distributed to organizational heads such as the CIO, CTO, and CITO of USAID
- **Identified** internal communication bottlenecks that slowed down the pace of experimentation and iteration, and assisted in the improvement of processes that facilitated better coordination between different departments

Main Instructor, Co-founder, BuildWithPy, Addis Ababa, ET

March 2021 - September 2021

- Taught engaging weekly online Python lessons for Saint Joseph High School students
- Achieved an 8x growth, expanding the community from 5 initial users to over 40+ active members. Improved course quality and user experience by actively integrating feedback from both students and faculty

PROJECTS

Pathfinding Visualizer | *Javascript, React, Java*

GitHub June 2023 - July 2023

- Engineered an interactive web application in 4 weeks enabling users to dynamically visualize key pathfinding algorithms, including Dijkstra's, and A* Search, navigating mazes
- Deepened expertise in data structures and algorithms by solving complex pathfinding problems
- Acquired foundational proficiency in **React** and **JavaScript** syntax in a short timeframe demonstrating adaptability, commitment, and self-driven learning to meet project specifications

Gradescope Chrome Extension | **HackMIT** | *Python, Javascript, Django*

GitHub | September 2023

- Collaborated in a 3-member team to address the slow assignment submission process on Gradescope by engineering a Chrome extension. By introducing automated page selection, we improved submission speeds by **up to 50%**, significantly enhancing the students' experience.
- Leveraging Selenium for dynamic web scraping and Google Vision API, we built a precise mapping algorithm for matching questions to corresponding answer pages. Our algorithm was able to accurately match the correct pages with 65% accuracy.