Dawit (Dave) Boku

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EDUCATION

Colby College, Waterville, ME   **Graduation Date:** May 2026

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

Minor in Mathematics

Organizations: ColorStack, CodePath, DavisAI Institute, DavisAI 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
- Engineered a scalable **custom data repository** using **Agile** methodology, accommodating **100+ entries** across 10+ institutions, resulting in **80% improved data accessibility** for the Coast-Crow-Consumer (C^3) Project.
- Increased **efficiency of data exploration and analysis** by **more than 50%** by implementing advanced search and filtering methods specific to the C^3 research
- Led the redesign and development of the C^3 data repository webpage, improving the User Experience and User Interface by improving **navigation**, **content organization**, and conducted **comprehensive QA Testing**.

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

AI Technology and Policy Intern, *USAID, Washington, D.C.*   January 2024 - February 2024
- **Authored** a comprehensive white paper on practical approaches to responsibly implement Artificial Intelligence in governmental contexts, influencing AI policy decisions for USAID's CIO, CTO, and CITO
- **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
- Designed and delivered weekly online Python courses to over 40 Saint Joseph High School students **over 7 months**, resulting in a **100% increase** in students' coding proficiency.
- 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

Gradescope PageMatch │ 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.
- Engineered a precise mapping algorithm using **Selenium** for web scraping and **Google Vision API**, achieving **65%** accuracy in matching questions to answer pages, while optimizing performance for real-time processing.

Pathfinding Visualizer │ *Javascript, React*   GitHub │ June 2023 - July 2023
- Mastered **React** and **JavaScript** fundamentals in 2 weeks, successfully developing a **web application** that enables users to dynamically visualize key graph traversal algorithms, including Dijkstra's, A∗ Search, BFS, and DFS to navigate mazes.