# Dawit Bonga

dawitbonga0@gmail.com | (415) 871-9014 | [in/dawit-bonga](#) | [Github](#)

## EDUCATION

**Yale University**                                                                                                                **New Haven, CT**
*B.S. Computer Science*                                                                                                        *Expected May 2028*
- **Relevant Coursework:** *Data Structures & Algorithms, Systems Programming, Discrete Math, Calculus 3*

## EXPERIENCE

**Amazon AWS**                                                                                                                      **Santa Clara, CA**
*Software Development Engineering Intern*                                                                           *May 2025– Aug 2025*
- Optimized model deployment through 4-bit quantization, cutting memory use by 60% and speeding up fine-tuned model testing cycles by 30%, improving system efficiency
- Designed and implemented integration tests in Fargate to support Bedrock's CI/CD pipeline, improving deployment reliability for fine-tuned foundation models.
- Migrated integration tests from AWS Lambda to AWS Fargate, enabling comprehensive validation of complex fine-tuning workflows and reducing deployment-blocking issues by 15%.

**Yale Student Technology Collaborative**                                                                       **New Haven, CT**
*Student Tech*                                                                                                                      *Oct 2024 – Present*
- Completed hands-on training program in troubleshooting and repairing computer hardware, gaining proficiency in diagnosing issues with a variety of devices.
- Resolved 25+ technical issues weekly across Windows, macOS, and Linux systems, providing hardware diagnostics, networking, and OS repair support as part of team serving 12,000+ Yale students
- Collaborated with team members to streamline repair workflows, reducing average troubleshooting time by 15%.

## PROJECTS

**College Express -** *AI-Powered College Planner*                                                          **Repository**
*React, FastAPI, PostgreSQL, OpenAI API*                                                                         *Live Demo*
- Deployed a full-stack web application (React, FastAPI, PostgreSQL, OpenAI API) for AI-powered academic planning, serving 40+ monthly users.
- Built scholarship database with filtering functionality and user feedback system to address real college planning challenges for first-generation students.

**Mini-Shell —** *Unix Command-Line Interpreter*                                                           **Repository**
*C, POSIX APIs, Process Management, Signals, I/O Redirection*
- Implemented a Unix-style shell in C supporting pipes, job control, background execution, and built-in commands.
- Implemented process creation and signal handling for reliable execution and process management.

**NBA Prop Predictor-** *Machine Learning Betting Model*                                               **Repository**
*Python, Streamlit, SQLite, Pandas, NumPy, NBA API*
- Built a machine learning–driven predictive model for NBA player prop betting, applying historical data and statistical analysis to achieve a documented 52% win rate on test simulations.
- Integrated persistent data storage with SQLite and developed an interactive Streamlit dashboard to visualize predictions, track performance trends, and compare model outputs over time.

## Leadership & Extracurriculars

**College For First Gen**                                                                                                          **San Francisco, CA**
*Founder*                                                                                                                                *Apr 2021 – Present*
- Founded TikTok platform providing college guidance and opportunities for first-generation students, growing to 7,500+ followers and 500,000+ likes through targeted educational content
- Mentored 20+ first-generation students through competitive admissions processes, achieving 60% acceptance rate to prestigious programs including MIT's MITES and Ivy League universities

**Additional Involvement**: ColorStack, Code Haven, NSBE, Computer Science Society, Gates Scholar, Amazon Future Engineer

## SKILLS

**Programming:**  Python, JavaScript, C, SQL, React.js, Tailwind CSS, Node.js
**Tools:** Git, Vercel, AWS (Bedrock, EC2, Lambda, S3), SQLite, OpenAI API, Postgres