Daniel Alemayehu

dtalemayehu01.github.io | daniel.alemayehu@colorado.edu | linkedin.com/in/dtalemayehu/ | github.com/DTAlemayehu01

EDUCATION

University of Colorado Boulder — August 2023 – May 2027
Bachelor of Science in Computer Science and Applied Mathematics — *Boulder, CO*

- Minor in Physics, Quantum Engineering, MCDB, and Computational Biology
- Certificate in Engineering, Ethics, and Society

EXPERIENCE

SPUR Undergraduate Assistant — May 2024 – August 2024
University of Colorado, Boulder — *Boulder, CO*

- Collaborated with PI to develop the PETSC Rust bindings
- Presented findings on Rust's Role in Scientific Computing in Technical and Nontechnical Conferences
- Expanded Documentation + Functionality for PETSC-rs

Data Structures Course Assistant — January 2024 – May 2024
University of Colorado, Boulder — *Boulder, CO*

- Coordinate with team to provide course office hours times through the week
- Answer questions in office hours about Data Structures and C++
- Support TAs and students in recitation by answering questions and taking attendance

PROJECTS

Differential Equations Modeling Project - Matlab — September 2024 - October 2024
University of Colorado, Boulder — *Boulder, CO*

- Applied Matlab coding and modeling skills to solve problems regarding fish population management for recreational fishing
- Collaborated and Communicated with group members to efficiently divide problem analysis

Jerrimeter — HTML, CSS, Javascript — February 2025
University of Colorado, Boulder — *Thornton, CO*

- Applied knowledge of Information Theory to build an educational password analyzer
- Utilized web technologies to build a browser frontend for end-users
- Placed 1st in the Cybersecurity track of T9-Medihacks hackathon

Music Merge - HTML, CSS, Javascript — March 2023 - April 2023
University of Colorado, Boulder — *Thornton, CO*

- Collaborated in a 5 person sprint team to deliver a project to merge multiple Spotify Playlists
- Wrote main NodeJS API calls to the Spotify API to merge user playlists with a variety of configuration options
- Presented a technical demonstration of our project to 200+ Students and Faculty

EXTRA/AWARDS

Colorado Engineering Magazine Writer — Fall 2024 – Present
CU Boulder — *Boulder, CO*

- Contributed to the Fall 2024 Issue on the magazine with an article on the Fediverse
- Communicated Niche Technologies to Nontechnical Audience

Dean's List — Fall 2023, Spring 2024
CU Boulder — *Boulder, CO*

- Awarded for semester GPA of 3.6+ as a full-time student

TECHNICAL SKILLS

Languages: Javascript (Nodejs), Python (Pandas, Numpy, Matplotlib, Plotly) , C/C++, HTML/CSS, SQL, Rust, Matlab, Sagemath, Assembly x86
Developer Tools: Git, Docker, VS Code, Github, Linux (Arch, Debian), Jupyterlab, Latex
Interpersonal: Collaboration, Teamwork, Leadership. Organization, Supervision, Presentation