Akash Dhiraj

✉ akashdhiraj2019@gmail.com   ⌨ polybeandip

Education

Cornell University **May 2025**
B.A. Math and Computer Science

Technical Skills...

- Languages: Java, C, Python, OCaml, Javascript/HTML/CSS, Bash, Harmony, LaTeX
- Frameworks and Libraries: ReactJS, Redux, PyTorch, NumPy, Pandas, Scikit-Learn
- Tools: Git, Github, Linux (Arch)

Selected Coursework...

- Object Oriented Programming and Data Structures
- Discrete Structures
- Data Structures and Functional Programming (CS 3110)
- Analysis of Algorithms (both graduate and undergraduate versions)
- Operating Systems
- Distributed Computing Principles

Work Experience

CS 3110 (Functional Programming) Teaching Assistant: Cornell University CS Department   *August 2023 – Present*

- Held weekly office hours, meant for students' queries on lectures, assignments, and exams.
- Designed, graded, proctored, and provided feedback on assignments and exams.
- Guided multiple teams of three/four students in completing their final class project.
- Designed labs and held weekly discussion sections.

MATH 1110 (Calculus I) Course Assistant: Cornell University Math Department *August 2022 – December 2022*

- Graded and provided feedback on homework assignments for approximately 500 students each week.
- Held weekly sessions to clarify concepts and assist in solving challenging problems.

Personal Projects

Where's My Class *August 2023*
User-friendly interface for Cornell students to visualize class locations on a map and plot routes between them.

- UI built using **ReactJS** and application state partially managed through **Redux**.
- Uses the Cornell Course Roster API to fetch class data.
- Uses the Mapbox API to display the map and fetch route data.
- Class data set to update daily through **Github Actions**.

View repository or website.

Lambda Ledge *April 2023*
2D-Platformer inspired by the highly acclaimed game Celeste.

- Written entirely in **OCaml**.
- Uses thin bindings to **SDL** to draw on the screen.
- Implemented the physics for the game from scratch; no game engines used.

View repository.