

Sam Alston

732-547-3519 | sza6@cornell.edu | [linkedin/sam-alston](https://www.linkedin.com/in/sam-alston) | somalston.io

EDUCATION

Cornell University

Bachelor of Arts in Computer Science, Minor in Mathematics

Ithaca, NY

Aug 2021 – May 2025

- GPA: 3.5
- Relevant Coursework: Functional Programming and Program Correctness, Object Oriented Programming and Data Structures, Linear Algebra, Discrete Structures, Web Design and Programming, Statistics

PROJECTS

ASCII Dungeon Game Engine | OCaml, Core, VS Code, Git, Dune, OPAM September 2022 – December 2022

- Developed game engine to read .json retro-style dungeon files
- Read user input commands to move player in real time
- Developed battle and cut scene system to enhance experience
- 1200+ lines of code with two team members, developed teamwork and large scale project skills
- Worked with creating documentation, .json, .txt, interface, and testing files

Sports Ranking System | Python, VS Code, Git

May 2022 – June 2022

- Developed a ranking system for collegiate rowing teams
- Extrapolated online results from the regular season to predict results in the championship season
- Developed a formula using Ordinary Least Squares (OLS) technique utilizing factors such as weather, recency of the race, home advantage to quantify teams evenly

Mapping Zipcodes | Python, Atom, Git, Matplotlib, pandas

December 2021 – February 2022

- Developed application to map zip-codes onto map of the United States
- Formatted with clean GUI for users
- Pulled from excel spreadsheet using online libraries

Space Invaders | Python, Atom, Git

November 2021 – December 2021

- Built a modern version of Space Invaders from scratch in Python
- Ingrained object-oriented programming skills
- Organized code with controller and sub controller model

TECHNICAL SKILLS

Languages: Java, Python, OCaml, SQL, C++, JavaScript, HTML/CSS

Frameworks: React, Node.js, GraphQL, JUnit, OUnit, Dune, Bisect

Technologies: Git, VS Code, Atom, Eclipse, Amazon Web Services

Libraries: NumPy, pandas, Matplotlib, Core, PyExcel, jQuery

LEADERSHIP AND ACHIEVEMENTS

- D1 Varsity Athlete - Lightweight Rowing (Member of the 1st Varsity Boat 2022)
- Big Red Leadership Institute - Member
- AP Scholar with Honor x 3
- 1520 SAT (790 Math, 730 Reading/Writing)