Ashley Vaughn

ashley.eva.vaughn@gmail.com | ashleyv@andrew.cmu.edu | 480-869-2096 | ashl3y-v on Github

Education

- Peggy Payne Gifted Academy — Fall 2020 – Present
  McClintock High School — Tempe, Arizona
  - ‣ GPA: Unweighted: 4.0, Weighted: 4.85
  - ‣ Standardized testing: ACT: 36, SAT: 1540
  - ‣ Notable Courses: independent research (on machine learning), multivariate calculus, linear algebra, statistics
- MIT BeaverWorks Summer Institute — July 2023 – August 2023
  embedded security and hardware hacking (in C) — Virtual
  - ‣ Team Obsidian - won the design challenge/CTF: [Project Repo](#)
- CMU School of Computer Science — 2024 – 2028

Experience

- Machine Learning, independent research — 2021 – Present
  - ‣ Computer vision, NLP, and reinforcement Learning
  - ‣ Model architecture and scaling
  - ‣ Pytorch: Building and training models
- InSpirit AI 1:1 Mentorship Program — January 2023 – Present
  Worked on transformer models for computer vision and reinforcement learning
- Programming — 2016 - Present
  - ‣ Languages: Rust, Python, C
  - ‣ Game Design: Creating games in Python, Lua, and C# in Unity
  - ‣ Algorithm Design: Algorithms and optimization
  - ‣ Low Level Programming: Studying C and Rust and embedded devices
  - ‣ Security: Encryption, exploits

Awards

- Arizona State Finals - Science Olympiad — 2022 & 2023
  5th place in Environmental Chemistry & Cell Biology — ASU - Tempe, Arizona
- National Spanish Exam Gold Medal — 2022
- AP Awards: AP Scholar & AP Scholar with Distinction — 2022 & 2023
- Academic Awards: Academic Letter and Scroll — 2022 & 2023

Other Interests

- Mathematics
  - ‣ Type theory, Lean, category theory, information theory
- Fencing — May 2020 - October 2022
  Phoenix Fencing Academy — Tempe, Arizona
- Linguistics & Philosophy
- Volunteering
  - ‣ Tutoring: Tutoring students in math, science, and history
  - ‣ Paz de Cristo Community Outreach Center: Making and serving meals for those in need
  - ‣ Phoenix Herpetological Society: Caring for the reptiles