Cyrus Singer

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Education

University of Pennsylvania May 2026
Bachelor of Science in Computer Science *Current GPA: 3.53/4.0*
Relevant Courses: Networks and Security, Engineering Probability, (graduate level) Internet and Web Systems

University College School (UK) July 2023
A Levels: *Physics A*, Economics A, Mathematics A*, Further Mathematics A*
GCSE/IGCSE (all 9s): Mathematics, English Literature, English Language, Spanish, Chemistry, Biology, Computer Science, Physics, Geography, Drama

Skills

Languages: JavaScript/TypeScript, Java, Kotlin, Python, C/C++/C#, HTML/CSS, LaTeX, Bash, Lua, Haskell, x86
Tools: GCP(Functions, Metrics, Cloud Run, IAM, Cloud Storage, Load Balancer), AWS(EC2, S3, Sagemaker, IAM), Firebase, Docker, Git, Tailwind CSS, Unix Shell, GDB
Frameworks: React, Node.js, Express.js, JUnit, Jest
Libraries: Tensorflow, pandas, NumPy, Matplotlib

Work Experience

Technical Lead on Bizzybots platform | *Wharton OID Lab* 2022 - Present

- I lead development of an LLM-powered chatbot platform used for negotiation research and education
- I lead the five-member development team, manage the development schedule, ensure product quality, and direct system design
- I also do full-stack, security, and devops development tasks.

Reference available upon request

Intern | *Olivetree Financial Ltd* Summer 2019

- Project - Developed web scraping tools for the financial research team
- Fundamental Analysis - Conceived, researched, presented a long-short investment proposal (Advanced Micro Devices)
- Other tasks - Assisted head research analyst; aided chief compliance officer by making graphics

Personal Projects

RL Experiment | *Java, Python, Tensorflow, Deep Q Learning* | source code 2020

- Developed a java physics environment in 2d to simualte agents in
- Tested multiple ML techniques on sed agents such as double deep Q learning
- Built a traning data pipeline to help train agents to complete a 2d obstical course

Tensorflow 2 ML Package | *Python, Tensorflow* | pacakge source, usage 2022

- Developed and documented a python package to simplify the process of creating and training ML models
- Added tools for automated training pipelines using callbacks for control
- Used the tools to train a CNN to classify images of flowers

Brittle Object Simulation | *Python, GPU optimization* | source code, 2022

- Program simulated the internal stresses of brittle lattices under forces and collisions
- Used a gradient decent method to resolve internal stresses

Weather Balloon Operating Code & Circuits
Python, Embedded Systems, Serial, USB, PWM, I^2C | source code Launched in 2019

- Software took measurements from onboard sensors, stored and transmitted the compressed data via a satellite link
- Built for hardware and software redundancy
- Worked with a partner who handled power and ballast, and lift systems of the balloon
- Received the CREST Gold award for the project