Zephaniah Roe

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EDUCATION

The University of Chicago, Chicago, IL

Bachelor of Science in Computer Science. Expected, June 2026

GPA: 3.82 / 4.0

Oak Park and River Forest High School, Oak Park, Illinois

GPA: 4.94 (weighted), 3.98 (unweighted)

Honors: Top senior Latin student (2022), Cum Laude Society (2022), and AP Scholar with Distinction (2022)

EXPERIENCE

JusticeText, Remote

Software Engineering Intern: (June to August 2024)

• Implemented React UI components and AWS DynamoDB transaction logic for full-stack applications

University of Chicago Harris School of Public Policy

Research Assistant: (January to June 2024)

- Automated a Python process to scrape Afghan government websites to download PDFs for name extraction
- Employed Anthropic and OpenAI APIs to extract names from Afghan government documents to track trends in employment status of individuals over time
- Performed statistical analysis on metadata present in images, PDFs, and Excel files from Afghan ministries

Park District of Oak Park, Oak Park, Illinois

Site Supervisor: Camp Spark Extended (June to August 2022)

- Oversaw 48 children ages 5-10 and a staff of five
- Handled management tasks such as overseeing spending and completing staff evaluations

PROGRAMMING

- Languages: Python, C, Rust, Javascript, Typescript
- Machine Learning: Experience with PyTorch, VAEs, CNNs and other machine learning architectures
- **Projects** (full collection of my projects can be found on my github):
 - o Toy Models of Superposition Paper Replication: a replication of an Anthropic research paper
 - o Neural network from scratch: neural network training implemented with only the standard library in C
 - o <u>tinyfilter</u>: a Python package that converts images into ASCII art using convolution
- o <u>zephaniahdev.com</u> and <u>zephaniahsdata.com</u>: personal websites built with React
- Relevant coursework: MIT 6.S191, AI Safety Fundamentals Alignment Course, Introduction to Computer Security, Systems Programming I & II and Introduction to Computer Science I & II, Linear Algebra
- Other Technologies: OpenAI and Anthropic APIs, git, SVN, Vim, VS Code, gdb, DynamoDB, Linux, etc.

ACTIVITIES

UChicago AI Safety / UChicago AI Alignment Research Team

Student Organizer and Independent Researcher (January 2024 to present)

- Worked on the UChicago Alignment Research team before switching to leadership role in the newer AI safety club which replaced the older version of the organization
- Coded our website, helped create our intro-curriculum, and facilitated fellowship meetings

UChicago Institute of Politics TechTeam / Genesys Works

Project Co-Leader (January 2024 to present)

- Led a team of over 10 undergraduate and masters students to build software for the non-profit Genesys Works
- Oversaw the codebase for a tool that will be used in 2 major US cities to pair hundreds of low-income students with internships

Other UChicago Activities: UChicago Effective Altruism, Research Lead for UChicago Alternative Protein **Other Interests:** Classical Latin prose and poetry, boxing, balloon twisting, rap music