Owen Fahey

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EDUCATION

The University of Chicago

Chicago, IL

Bachelor of Science in Computer Science & Bachelor of Arts in Philosophy

Expected June 2024

- CS Major GPA: 3.9
- · Specialization: Machine Learning
- Selected Coursework: Honors Algorithms, Computer Systems, Databases, Programming Languages, Discrete Math, Data Visualization, Data Science, Probability, Math for Machine Learning, Deep Learning Systems (TTIC)

National Outdoor Leadership School

Lander, WY

Fall Semester in the Rockies

August 2021 – November 2021

• Developed teamwork, leadership, and first responder skills on multiple wilderness expeditions.

Test Scores: SAT: 1590, ACT: 36, American Invitational Math Exam Invitee (top 5% of AMC 12 scores)

SKILLS

Languages: Python, JavaScript, TypeScript, C, Rust, HTML, CSS, Scala, SQL (Postgress) **Python Libraries**: OpenCV, NumPy, PIL, Matplotlib, scikit-learn, PyTorch, Flask, Django, bpy **Web**: React.js, Next.js, Node.js, D3.js, NPM, Apache, Web Components, Express.js, Three.js

Other: Git, Github, Linux, FFmpeg, JSON, YAML, Bash, REST

EXPERIENCE

Jason Salavon Studio Chicago, IL

Software Developer

June 2022 – Present

- Spearheading system design and engineering on two art pieces created using in-house style transfer models, contributing 15k+ lines to the studio's primary codebase.
- Architecting a GPU-based animation pipeline using parallel computing, diffusion models, and GPT-3 integration, enabling the production of large-scale animations with billions of pixels per frame.
- Collaborating with designers to quickly transform Figma mockups into functional software prototypes.
- Engineering a web application with a highly customized map interface using React.js, Leaflet, Apache, and Node.js that receives tens of thousands of monthly visitors.

University of Chicago Computer Science Department

Chicago, IL

Research Assistant to Professor Gordon Kindlmann

May 2023 – Present

- Working to improve the effectiveness of data visualizations by accounting for differences in color perception.
- Devising numerical algorithms to create tailored, perceptually uniform color spaces by calibrating CIELAB models.
- Constructing an application for research studies to assess the efficacy of techniques aimed at rapidly and accurately modeling an individual's perception of color.

Lexset.ai Brooklyn, NY

Software Engineering Intern

January 2022 – June 2022

- Enhanced a Blender-based 3D scene and synthetic data generator with dozens of client-requested features.
- Secured firm's largest client by producing a tech demo dataset of 38,000 synthetic American Sign Language images.
- Automated HDRI classification and tagging, reducing processing time by 75%.
- Monitored and debugged CoreWeave GPU instances ensuring optimal performance in machine learning workflows.

PROJECTS

Relational Database Storage Manager · Rust

January 2023 - March 2023

- Designed a functioning storage manager and slotted pages for a relational database using heap files.
- Implemented query operators such as AGGREGATE, GROUP BY, and JOIN from scratch.

Flight Delay Predictor · Python, scikit-learn, Feature Engineering

September 2022

• Created a model to predict whether a flight was going to be delayed, achieving an AUC score of 0.74.

Music Overlap Analyzer · Python, Flask, OAuth, scikit-learn

April 2022

- Developed an app to identify songs and artists mutually listened to by two users.
- Employed k-means clustering to generate a Spotify playlist based on overlapping musical preferences.