# **Samuel Magid**

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#### **EDUCATION**

Williams College, Bachelor of Arts in Computer Science, 3.97/4.00 GPA Williamstown, MA | Expected December 2025

The College Preparatory School, 4.00/4.00 GPA

Oakland, CA | Graduated June 2021

#### RESEARCH AND PROJECTS

#### Font Neural Encodings, Thesis

August 2024 – Present

- Designed variation autoencoder models in PyTorch on a self-made database of 1M+ font glyphs; extracted latent font style encodings from these models to build effective user tools for font suggestion and selection
- Developed end-to-end React font selection tool with Flask backend, communicating with Google Fonts API

#### Distributed Load Testing w/ AWS and Azure VMs, Final Project

December 2024

• Programmed and distributed "bot" programs on 90+ Amazon EC2 and Microsoft Azure virtual machines via SSH and telnet protocols; built system and network monitoring tools to test 1M+ sequential HTTP requests on machine

## **Bookstore Server and Client, Course Project**

October 2024

• Built a full-stack SQL-based bookstore application with server-client communication through XML-RPC protocol

# **HTTP 1.1 Web Server, Course Project**

September 2024

• Coded a multi-threaded HTTP 1.1 web server in C serving requests for HTML, text, and image data, with relevant (400, 401, 403, 404) errors, handling 20,000+ concurrent requests, and passing Apache Benchmark standards

#### YOLO v1 PyTorch Implementation, Final Project

May 2024

• Implemented a minimal version of the YOLO (You Only Look Once) object detection system in PyTorch and presented about our work and the convolutional neural network framework in a succinct, digestible format

#### **SKILLS**

Languages: Python, Java, C, F#, Bash, R, SQL Technologies: Deep Learning, Machine Learning, Distributed Systems

Frameworks: PyTorch, React, XML-RPC, Apache Hadoop, Flask Other: Adobe Suite, Design, Communication Skills

### WORK, LEADERSHIP, AND VOLUNTEERISM

### Williams Computer Science Department, TA and Tutor

Williamstown, MA | Fall 2022, February 2025 – Present

- Teach fundamental introductory and systems-level Computer Science material alongside instructors during labs
- Host evening review and lab-help sessions multiple times weekly for upwards of 40 students per night

## Williams College Jewish Religious Center, Kitchen Manager

Williamstown, MA | August 2023 – Present

- Oversee cooking of Friday night Shabbat meals for ~125 students weekly
- Maintain and uphold laws of Kashrut while ensuring efficient kitchen operation
- Coordinate menus, cooking schedule, and meal preparation for a team of 40+ student volunteers

#### Williams Outing Club (WOC), Vice President

Williamstown, MA | February 2022 – Present

- Run a 1,000+ member student outdoors organization—planning weekly outdoor and overnight programming, leading board meetings, increasing outdoor accessibility, and designing posters and flyers to promote our events
- Organized and put on our annual Winter Carnival event for 2,000+ community members, fundraised over \$15,000

#### Appalachian Mountain Club, Hut Croo

Gorham, NH | May 2024 - August 2024

• Cooked breakfast and dinner daily for 40+ guests, with all ingredients carried on external-frame backpacks 3+ miles from trailhead; worked in a small team to prepare meals, upkeep facilities, and ensure guest satisfaction