# Sawan Srivastava

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### **EDUCATION**

## University of California, Berkeley

B.A. Data Science

GPA: 3.8/4.0

May 2026

Relevant Coursework: Data 8 - Foundations of Data Science, CS61A - Structure and Interpretation of Computer Programs, Data C104 - Ethics of Data, Math 54 - Linear Algebra and Differential Equations

#### EXPERIENCE

## Amazon Web Services (AWS)

June 2025 - August 2025

Bellevue, WA

Software Development Engineer Intern

• Core Search - AWS OpenSearch

Working on approximation: https://opensearch.org/blog/opensearch-approximation-framework/

# University of California, Berkeley

December 2024 - Present

Undergaduate Student Instructor (uGSI)

Berkeley, CA

 Developing curriculum and maintaining infrastructure for the Linux System Administration (CS198), UC Berkeley's premier Linux course with 110+ enrollees every semester.

# **Open Computing Facility**

August 2024 - Present

Decal Committee Head

Berkeley, CA

- · Recruited and managed a team of volunteer instructors, fostering a collaborative teaching environment that increased student satisfaction ratings by 20% through leadership, mentorship, and team coordination skills.
- Implemented feedback-driven improvements to the curriculum and expanded outreach to prospective students, boosting enrollment by 15% and diversifying the student base by leveraging Google Forms for surveys, data analysis tools in Python, and targeted email campaigns with Mailchimp.

# Science of the Soul

December 2023 - May 2025

Software Engineering Intern

Petaluma, CA

- · Automated infrastructure management for two enterprise data centers, reducing manual effort by using Bash scripts, Ansible, and Docker Swarm.
- Configured and maintained Docker cluster running applications including Jenkins (CI/CD), Kanboard (project management), and FreeSwitch (PBX).
- Administered Cisco switches, pfSense firewall, and IP PBX system, providing technical support for 150-200 users weekly.

## Projects & Activities

## PlantPedia | Python, AR, PlantNet API, Gemini LLM

October 2024

- Developed an AR Plant Doctor utilizing APIs such as PlantNet and Google's Gemini LLM to curate plant growth guidelines.
- Integrated custom neural networks and logistic models to provide precise plant care advice and diagnosis.
- Collaborated on backend design to support seamless interaction between AR features and plant data sources.

#### EigenFood | Python, React Native, Gemini LLM, FastAPI, Google Places API

September 2024

- Developed a Python-based tool to convert Roman numerals to decimal values, integrating the Numbers API to display trivia about numbers.
- Engineered a robust algorithm capable of handling complex edge cases in Roman numerals with high accuracy.
- Enhanced user experience by designing an interactive CLI, achieving average response times under 200 milliseconds.

#### SKILLS

**Languages**: Python, Java, C++, CUDA, SQL, Bash

Technologies: Linux, Docker, Git, PyTorch, NCCL, Numpy, CuPy, Pandas

Concepts: Distributed Systems, Network Administration, Python Scripting, Data Analytics, Machine Learning, Deep Learning, Natural Language Processing (NLP), Computer Vision, RAG, Model Training and Evaluation