

HENRY PHAM

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EDUCATION

SAN JOSE STATE UNIVERSITY | San Jose, CA

Expected May 2025

Bachelor of Science Candidate, Computer Science

GPA: 3.70/4.00

- **Relevant Course Work:** Machine Learning, Data Structures and Algorithms, Data Visualization, SQL Databases & Management Systems, NoSQL Database Systems, Information Security, Computer Networks, Operating Systems, Advanced Computer Architecture, Linear Algebra, Object Oriented Design, Programming Paradigms,

SKILLS

- **Technical Skills:** Java & Python (Proficient), SQL(Proficient), Git & CLI (Proficient), Docker(Intermediate), C (Intermediate), JavaScript(Intermediate), HTML/CSS(Intermediate), Swift (Beginner), WSL, AWS
- **Frameworks/Libraries:** SpringBoot, Django, Flask, React, Tensorflow, Node.js, PostgreSQL, OpenAI API

EXPERIENCE

Computer Science Department @ SJSU | San Jose, CA

Aug 2022 - Present

Lab Instructor/Teaching Assistant (Introduction to Data Structures & Algorithms)

- Teaching 25-35 college students data structures in Java using paired programming and hands-on labs.
- Topics include data structures, data algorithms, time complexity, and programming fundamentals.
- Identifying class struggles and strategizing with the professor to develop a plan to ensure student success.

MESA Engineering Program @ SJSU | San Jose, CA

Jan 2024 - Present

Computer Science Peer Advisor

- Provide support and one-on-one advising to 20-30 engineering students from underrepresented and/or educationally disadvantaged backgrounds. Ensure student success through communication and planning.
- Assist with preparations and implementation of 3 professional and 5 community events per semester.

PROJECTS

MyBetterScheduler | Java, Springboot, HTML/CSS, Javascript, Docker, PostgreSQL

March 2024 - Present

- Developed and launched MyBetterScheduler, a web app aimed to help students find, understand, and visualize their course schedule at SJSU prior to enrolling to avoid unnecessary fees.
- MyBetterScheduler full-stack web app foundationed on Springboot Hibernate and PostgreSQL backend.
- Integrates RateMyProfessor API to link course professors with their RateMyProfessor page.
- Developed a Java Jsoup scraper to convert SJSU's enrollment page into database entities.
- Deployed using Docker and Heroku, assisting up to 500 students to find and enroll in their courses.

SJSU Enrollment Tracker | Python, HTML/CSS, Javascript

Jan 2022 - Present

- Webpage aimed to help students track course enrollment availability in Flask, HTML/CSS, and Javascript.
- Developed a Python script that scrapes and converts SJSU's enrollment page into database queries daily.
- Employed a cronjob on WSL to scrape daily and hosted the website using AWS.
- During every enrollment period, the site gains 350 visits per day and has helped students of all majors.

English Character Classifier Model | Python, Tensorflow

April 2024

- Aimed to rival OCR in letter recognition. Achieved up to 95% confidence and more than 90% accuracy.
- Developed a convolutional neural network (CNN) model using TensorFlow Keras to interpret written text.
- Designed a sequential CNN architecture with convolutional and pooling layers, followed by dense layers.
- Compiled using Adam optimizer and trained on sparse categorical cross-entropy loss.

Data Analysis & ML Model on Children's Autism | Python, Sci-kit, Plotly

April 2024 - May 2024

- Webpage aimed to assist Students find appropriate SJSU community college course equivalents.
- Developed a Python script that scrapes and inserts SJSU's course articulation pages into PostgreSQL.
- HTML, CSS, and React Javascript interface, and containerized and deployed our application with Docker.
- During the summer enrollment period, we help over 500 students find class equivalents at another college.

EXTRACURRICULAR ACTIVITIES

San Jose Hacks (SJHacks), President

Aug 2022 - May 2023

Alpha Phi Omega (APO), Secretary

Aug 2022 - May 2024