

# Sydney Su

✉ scsu@ucsd.edu    🔗 sydney-su    in sydney-c-su    📄 sydney-su.github.io

## Education

### University of California, San Diego

GPA: 3.96

Bachelor of Science: Computer Science

Est Grad: June 2026

- **Coursework:** Deep Reinforcement Learning, ML Algorithms, Advanced Data Structures, Statistics  
IP: Computer Vision, Deep Learning, NLP, Recommender Systems, Web Mining, Convex Optimization
- **Activities:** Women in Computing (WIC), Association for Computing Machinery (ACM)

## Professional Experience

### Software Engineer Intern

Palo Alto, CA

Rivian and Volkswagen Group Technologies

June 2025 - Sept 2025

- Leading LLM development and preparing for end-to-end analytics on the Insights Data Platform Team

### Machine Learning Researcher

Remote

AlgoVerse

Jan 2025 - Present

- Improving face privacy for model training datasets with novel diffusion and face inpainting processes
- Resultant research paper will be published on arXiv, submitted to AI conferences (NeurIPS, Workshops)

### Data Engineer Intern

San Jose, CA

Western Digital

May 2024 - Jan 2025

- Identified ways to improve efficiency while working on thin-film deposition manufacturing team
- Boosted failed batch yield by 99% through real-time detection of faults (alarm triggers which stop the line)
- Data manipulation with SQL and Python, used classifier to determine whether processes are within spec

## Projects

### Linear Regression Model

[LinearRegression](#) 🔗

- Achieved 100% accuracy in comparison to sklearn LinearRegression model
- Normalized data, used gradient descent, lasso/ridge regularization, adaptive learning rate, and early stop

### Neural Network from Scratch

[Neural Network](#) 🔗

- Built a neural network from scratch (only numpy and math) with one hidden layer
- Attained 84% accuracy on handwritten digits (MNIST dataset) improving over baseline of 10%

### Breast Cancer Classification

[BreastCancerClass](#) 🔗

- Achieved accuracy of 99% on breast cancer dataset, improving over baseline accuracy of 63%
- Performed exploratory analysis with Seaborn pairplot, z-score normalization, model prediction with SVM

### BookNexus (IP)

[BookNexus](#) 🔗

- Designed and implemented a robust full-stack bookstore application where users can view, buy, and sell
- Developed RESTful APIs to enable CRUD functionality, leveraging Flask between the dynamic React frontend and the performance optimized PostgreSQL database
- Implementing security through user authentication, error handling, and prevention of SQL injection attacks

### Content Creation

[@sydcreates](#) 🔗

- Wrote scripts and recorded progress for YouTube channel which now has 19,000+ views and 300+ subscribers

## Additional Info

**Languages:** Python, SQL, C++, C, C#, Java, Assembly, HTML, CSS, JavaScript

**Technologies:** Git, Linux, pandas, numpy, matplotlib, tensorflow, sklearn, Flask, React, PostgreSQL, Jupyter

**Hobbies:** Cooking, Running, Volleyball, Hiking, Reading, Playing with my dog