

Education

San Diego State University

Bachelor of Science: Computer Science, Cumulative GPA: 3.63

San Diego, CA
Aug 2021 - Dec 2024

- **Coursework:** Computer Organization, Data Structures, Artificial Intelligence, Machine Learning, Computer Architecture, Operating Systems, Advanced Programming Languages, Principles and Techniques of Data Science
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Skills

Programming Languages: C++, Java, Python, R, MIPS, Haskell, Prolog, Matlab

Web Development: HTML, CSS, Javascript

Tech: Eclipse, Pycharm, CLion, Git, Mars, Rstudio, VSCode, Github, Git, Visual Studio, Docker, Cmake Projects, Jupyter Notebook

OOP Design and Development, Data Structures and Algorithms, Software Development Life Cycle, Distributed Systems

Experience / Projects

Software Engineering Internship KLA | (Back-End)

May 2024 - August 2024

Work Project | C++

- Explored and researched different distributed messaging frameworks such as KAFKA & ZeroMQ
- Tested latency, throughput, and other metrics on different distributed systems
- Worked to build an application on top of the distributed messaging framework for high speed data transfer
- Deployed the application to the company cluster for further testing and proof of concept
- Compiled all the research to deliver a recommendation backed by tested results on a messaging framework

Image Captioning AI | (Front-End, Back-End)

August 2023 - January 2024

AI Club Project | Python | [Github](#)

- Utilize hugging face blip image captioning model and retrained it to better suit the needs of the project
- Designed a website with stream-lit open-source app framework to host the retrained model in a user interface
- Second iteration the model was built from scratch using tensorflow transformers on 30 thousand images

Lower Case Letter Identification | (Back-End)

May 2023 - August 2023

Personal Project | Python | [Github](#)

- Built a Neural Network from scratch that uses image processing to analyze images (Computer Vision)
- Implemented Relu & Softmax activations, Categorical Cross-entropy loss and Adam optimizer functions
- Sourced all the data for training and testing, model performance was 98% accuracy and 0.2 loss

Portfolio Website | (Front-End)

November 2023 - January 2024

Personal Project | HTML / Javascript | [Website](#)

- Designed a static website that links together my projects, contact information, and resume
- Used GitHub pages to host the webpage through a repository with unique domain name

Multi-threaded Delivery Service | (Back-End)

January 2024 - May 2024

School Project | C++

- Implemented a delivery service using pthreads library that consumes request from a bounded buffer
 - Different types of producers could send in messages and different delivery services would be able to consume
 - Mutex / semaphores utilized to ensure data integrity between the different processes
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Leadership & Activities

- Artificial Intelligence Club
- SHPE Club