

Sang Do

510-779-4192 | s1do@ucsd.edu | [linkedin.com/in/sang](https://www.linkedin.com/in/sang) | github.com/sangpotado

EXPERIENCE

Research Assistant Volunteer

Aug. 2024 – Present

Looger Lab, UCSD

San Diego, CA

- Consult researchers on statistical methods while analyzing, interpreting, and visualizing RNA sequencing and proteomics datasets. Utilize advanced data analysis techniques, including heatmaps, correlation matrices, volcano plots, PCA, t-SNE, UMAP, clustering, and radar plots

GMP Laboratory Associate

Aug. 2021 – Oct. 2022

Synthego Corporation

Redwood City, CA

- Developed Python scripts and automated data analysis pipelines, reducing manual data entry time by 90%. Led cross-team collaboration with Supply Chain, Quality Assurance, and Warehouse to improve processes and ensure operational efficiency. Implemented Jira and Confluence for workflow management, optimizing task scheduling and project visibility. Operated advanced robotic systems and trained team members in key laboratory techniques such as HPLC and SPE.

Healthcare Specialist/Platoon Line Medic

Feb. 2017 – Aug. 2020

United States Army

Fort Bragg, NC

- Served as a line medic for an Infantry platoon, managing the medical readiness and health of 25 soldiers daily and during training events. Delivered emergency medical treatment, limited primary care, and evacuation during Operation Freedom's Sentinel in Afghanistan, providing care in intense operational settings. Assisted with outpatient care in clinical facilities under a physician assistant's supervision and maintained accountability for Class VIII medical supplies and equipment valued at over \$100,000.

PROJECTS

2Dsim | *JavaScript, p5.js, Git, GitHub Pages*

June 2020 – Present

- [ParticlesOfLife](#) | [Drawer](#) | [Evolution](#)
- Used the p5.js library, object-oriented programming (OOP) principles, and linear algebra concepts to create a quadrant graph application. Explored beginner artificial intelligence (AI) concepts such as genetic algorithms, layers, gradient descent, and backpropagation by building a neural network from scratch

Airbnb Word Embedding Model | *Repository Python, PyTorch, Git*

April 2024 – May 2024

- Developed a neural network to train word embeddings, creatively using Mean Squared Error (MSE) loss instead of traditional n-gram or bag-of-words methods. Preprocessed Airbnb listing data, encoding text as one-hot vectors to predict numerical attributes like price and location. Used Git for version control and collaborated with a team to evaluate word embedding effectiveness for predicting numerical attributes

TECHNICAL SKILLS

Languages: Python, C++, JavaScript, HTML/CSS, SQL

Developer IDE: Linux, Git, VS Code, Visual Studio, PyCharm, Eclipse

Libraries: pandas, NumPy, Matplotlib, PyTorch, Seaborn, p5js

EDUCATION

UC San Diego

San Diego, CA

4th year - Computer Science

Sep. 2023 – Present

Ohlone College

Fremont, CA

Associate's in Computer Science, GPA: 3.8

Aug. 2021 – May 2023

Ohlone College

Fremont, CA

Associate's in Biology, GPA: 3.8

Aug. 2013 – May 2016

Google IT Support Certificate

April 2021