

MACHINE LEARNING ENTHUSIAST & DATA SCIENCE STUDENT

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### **Education** \_

### **University of California: San Diego**

La Jolla, CA

BACHELOR OF SCIENCE IN DATA SCIENCE, PROVOST HONORS, GPA: 3.5/4.0,

Sep. 2018 - May 2022

- · Coursework: Natural Language Processing, Statistics, Algorithms, Data Structures, Multivariable Calculus, Linear Algebra
- · Volunteered as data science student panelist to speak to incoming data science students and answer questions

#### Coursera

• Deep Learning Specialization: Neural Networks and Deep Learning, Improving Deep Neural Networks: Hyperparameter tuning, Regularization and Optimization, Structuring ML Projects, Convolutional Neural Networks, and Sequence Models

### Skills

Languages Python, SQL, Java, Javascript, RegEx, HTML, CSS

Frameworks Keras, Tensorflow, ReactJS, Pytorch, Pandas, OpenCV, Spring, Matplotlib, Seaborn

# **Experience** \_

### **Cardiac Mechanics Research Group**

La Jolla, CA

SOFTWARE ENGINEER Nov. 2019 - Present

- Developing full stack with ReactJS, Java, and SQL for a database application that stores and presents clinical data and MRI images
- · Performing programming and scripting tasks as requested by researchers and lab management

iDTech Camps Lisle, IL

Machine Learning Instructor

June 2019 - Aug. 2019

- Taught deep learning and python programming to 50+ high school students using Keras, Tensorflow, and OpenAl Gym
- Managed student behavior, administered safety procedures, and planned camp logistics

#### **UC San Diego Health Department of Medicine**

La Jolla, CA

May 2018 - July 2018

DATA PROGRAMMER

March 2019 - June 2019

- · Migrated data from central data warehouse to department's personal SQL server by writing automated T-SQL procedures
- Performed scripting projects for fuzzy logic algorithms, data processing, and python/SQL integration

Swarm Robotix Naperville, IL

SOFTWARE ENGINEERING INTERN

- Developed and benchmarked computer vision and deep learning solutions for image segmentation
  Collaborated to created a custom motion planning interface to control and locate a swerve drive mechanism
- Headed documentation efforts for the drive train and computer vision teams

iManage Chicago, IL

**R&D INTERN** *June 2017 - Aug. 2017* 

- Designed and implemented scalable test cases to troubleshoot database and file IO procedures carried out by iManage Drive
- Assisted in the process of porting iManage Drive's file system interactions for the Mac Operating System
- Supplemented natural language processing research and data preprocessing for the Labs teams

## **Extracurriculars** \_\_\_\_

### **Data Science Student Society @ UCSD**

La Jolla, CA

**EVENT PLANNING COMMITTEE MEMBER** 

May 2019 - PRESENT

- Collaborating with companies and other student organizations to hold on-campus events for the UCSD data science community
- Planning and facilitating logistics for data-science focused social, professional, and networking events throughout the school year

# **Projects**

### Sequence to Sequence Question Answering System - NLP Final Project

- Utilized the Stanford Question Answering Dataset and pretrained GloVe embeddings to train models capable of answering questions
- Created RNN, LSTM, bidirectional LSTM, and multi-headed self attention deep learning models using Pytorch for automatic differentiation

### **Microsoft Pet Breed Classification Challenge**

- · Built and trained ensembled machine learning models to classify images of 40 distinct pet breeds in an 8 hour time limit
- · Achieved approximately 90% test accuracy on Kaggle leaderboard and placed 4th at the 2019 UCSD Datathon

#### **UCSD Clustering**

- Wrangled and filtered a dataset of landmarks on UCSD campus using the Google Maps API
- Implemented an unsupervised k-means clustering algorithm to identify UCSD's 6 residential colleges