
EXPERIENCE

Blend San Francisco, California
Machine Learning Engineer

September 2017 - Present

Deployed a data science toolbox with support for multiple users that allowed distributed training via Spark. Applied deep learning NLP methods to categorize and cluster user reviews. Implemented a LSTM-RNN model to replace a naive keyword based filter to flag complaints in user comments, improving precision and recall from 70% to 90%.

Blend San Francisco, California
Software Engineering Intern

June 2017 - September 2017

Trained an RNN to predict whether a user would submit a loan application given user activity chains with 90% accuracy. Created log ingestion pipeline via Spark with immutable S3 data store. Deployed Airflow with CI/CD to standardize analytics and coordinate ETL jobs.

NASA Jet Propulsion Laboratory Pasadena, California
Software Engineering and Computing Systems Intern

June 2016 - January 2017

Created web applications with Flask, Docker, and Elasticsearch. Used Stanford DeepDive and MITIE to create RDF triple stores for a question answering system built off of YodaQA.

PROJECTS

DistBelief (<https://github.com/ucla-labx/distbelief>)

Implemented DistBelief's DownpourSGD (asynchronous distributed training) by extending PyTorch's optimizer class. Wrote small library to support an actor model using PyTorch's native distributed message passing ability.

Twitter Sentiment Analysis (https://github.com/jcaip/twitter_sentiment_analysis)

Used Tensorflow to create an RNN model with LSTM cells to predict the sentiment of tweets. Trained on ~10000 tweets with custom word embeddings and achieved a 70% test accuracy.

Technical Blog (<https://jcaip.github.io>)

A technical blog about interesting ideas in computer science and side projects. Primarily focused on deep learning, artificial intelligence, and algorithms.

EDUCATION

University of California Los Angeles

September 2015 - Expected June 2020

B.S. in Computer Science, Upper Division GPA: 3.51

Relevant coursework: CS 111 Operating Systems, CS161 Artificial Intelligence, CS180 Algorithms and Complexity, CS M151B Computer Architecture

Association of Computing Machinery

December 2015 - March 2017

President - UCLA ACM AI

Created and taught a series of machine learning workshops that drew over 200 total. Received the ACM Student Chapter Excellence Award in 2017. Lead team of 9 student officers.

SKILLS

7+ years experience with GNU/Linux, the command line, and vim • Chinese (Read/Speak)
Fluent in Python, C, C++ • Competent in Scheme, Java, and Javascript