

Jun Hwee Oh

j6oh@ucsd.edu | <https://www.linkedin.com/in/mosesjunoh> | <https://www.github.com/Moses0h>

EDUCATION

University of California, San Diego – B.S. Data Science

WORK EXPERIENCE

Google

June 2022 - October 2022

SWE Intern | Python, Tensorflow, Keras, C++, TFlite

Assistant - Natural Conversations

- Implemented on-device multi-modal semantic filtering model that detects if a user's query is intended for Assistant or not.
- Collaborating with Google Research to experiment with various encoders for multimodal architecture and fine tune an audio dialog classifier to generate soft labels for unlabeled dataset (semi-supervised learning).

Brain - Magenta

- Modeling note velocity prediction that estimates the force with which a note is played as part of MT3 transcription.
- Trained CNNs conditioned on pitch and instrument (FiLM layers) and using quantized velocity labels (binning, K-Means).
- Evaluating various training methods such as regression vs classification as well as predicting relative velocity shift.

Hume AI

January 2022 - June 2022

MLE Intern | Python, Pytorch

- Implemented NLP batch and streaming pipeline consisting of ASR using VAD, Wav2Vec2 + T5 Transformers, and emotion classification with a fine-tuned language model.
- Implemented facial identification across video frames for Hume's facial expression model.
- Trained and deployed additional vision models including FACS classification and face description.
- Implemented face detection package consisting of SOTA models that is used in training/inference of face expression model.

Google

September 2021 - December 2021

SWE Intern | Python, Tensorflow, C++, SQL

Maps - Personalization Platform & Core ML

- Productionized TF-IDF weighted GloVe embeddings to calculate how relevant a Google Maps review is to the place - boosting personalization ML models.
- Explored millions of Google Maps data points to analyze correlation across different verticals and determine the best model.
- Created user surveys alongside other data scientists to gather thousands of data points for model evaluation.

Spatial

June 2021 - September 2021

SWE Intern | C#, Unity, React.js, Typescript, Tensorflow, Python

- Shipped major Spatial 5.0/6.0 features such as Participant List, New Subdock, Moderation System for blocking/reporting.
- Utilized pre-trained holistic model + logistic regression to classify emotion and body pose for WebGL avatars via webcam.

Virtualitics

July 2019 - August 2019

Data Science Tutor | Python, Jupyter, Scikit-learn, Seaborn

- Lead high school students through a machine learning project start to finish from data exploratory analysis to implementing classical ML models including logistic regression, decision trees, and random forests.

NASA

June 2019 - August 2019

SWE Intern | C#, Unity, Javascript

- Created new 3D hand controls/gestures for NASA's holographic CAD software.
- Developed AR slide functionalities - save, update, and delete CAD models' current state - allowing NASA scientists and engineers to replicate a PowerPoint experience for holographic models (Europa, Mars Rover) in 3D space.

RELEVANT COURSES

MATH 18 – Linear Algebra

DSC 102 - Systems for Scalable Analytics

DSC 140 - Probabilistic Modeling and ML

DSC 190 - Representation Learning

CSE 151B – Deep Learning

CSE 152A – Computer Vision