Ricky Martin

Cell: (661) 808-3055 **Email:** rickylenmartin@gmail.com **LinkedIn:** www.linkedin.com/in/rickylm/ **Github**: github.com/RickyMartin-dev

WORK EXPERIENCE

Mid-Level Machine Learning (AI) Engineer

Ardent MC / New York, NY (Remote) / JAN 2022 – PRESENT

- Led the development and deployment of a classification algorithm on heavily skewed data using XGBoost, achieving best PRAUC score of .91 after employing SMOTE techniques. Built in and monitored via AWS SageMaker
- Partnered with security team to build end-to-end time series models (ARIMA, Kalman Filter, Prophet) to monitor login attempts in Splunk throughout various applications predicting anomalies and reducing threat targeting time by 90%
- Used Keras and Tensorflow to build Object Detection Algorithms through use of Drone Camera Data
- Built and Maintained ML pipeline using technologies like GraphQL, SQL, Python, And AWS to serve predictions on anomalies related to the efficiency of internal performance metrics in real time

Data Scientist

Redica Systems (Formerly Govzilla) / Los Angeles, CA / OCT 2020 – OCT 2021

- Implemented production-level Unsupervised DBSCAN algorithm in Python, utilizing NLP techniques like TF-IDF to cluster documents, streamlining the manual labeling process and saving 40+ man hours
- Collaborated with cross-functional teams to define client KPIs and develop customizable Data Analytics Dashboards in Tableau tailored to non-technical clientele showcasing impact of Data-Driven/Machine Learning Solutions
- Improved precision and recall of semi-supervised classifier using feature engineering, enhancing the model's effectiveness
- Created cosine similarity search algorithm to acquire documents most similar to target given vectorized document embedding

Software Engineer, AI Research Specialist

UCSD Bio Inspired Robotics and Design Lab / San Diego, CA (Hybrid) / May 2018 – July 2021

- Spearheaded the construction of 5 distinct ML on edge device iterations gathering data, building large datasets from sensors, and using Python/C++ to extract, clean, transform, interpret, and train Sequence-to-Vector Deep Learning LSTM/GRU Models
- Built a GAN model from scratch in Python to replicate and extend the custom dataset
- Devised a Random Forest parameter tuning pipeline that utilized impactful features for 95% faster classification

Data Scientist Intern

GoSite / San Diego, CA / OCT 2019 - OCT 2020

- Programmed and deployed recommendation system using SVM and KNN to rank new leads based on predicted call length and probability of purchasing website development services, resulting in a 20% increased closure rate
- Developed cost optimization script that calculated efficiency of project scope to that of GPU instance for 70% cost reduction

PROJECTS AND LEADERSHIP

Comedian Chatbot for personal Website

- Built, Dockerized, and Deployed user-friendly ChatGPT chatbot using OPENAI API, LLaMA, and LangChain to engage visitors and showcase applied NLP communication skills **website**: personalportfolio-rlm.herokuapp.com/

Robot Arm Optimal Path Finder

- Instructed a team in applying Q-Learning Reinforcement Learning to find optimal path through 3d printed maze using robotic arm

TECHNICAL SKILLS

Frameworks: NumPy, Pandas, Scikit-Learn, Matplotlib, Seaborn, OpenCV, TensorFlow, Keras, Pytorch, NLTK, HuggingFace

Domain Knowledge: Ensemble Learning, CNN, GAN, RNN, GRU, LSTM, Transformer, BERT, GPT, LLM, Generative AI

Technologies: Python, SQL, No-SQL, C++, Git, Jupyter, Docker, Databricks, Spark, AWS, Tableau

EDUCATION

University of California, San Diego (UCSD) / Graduated July 2021

B.S. in Cognitive Science (Machine Learning Specialization)

Publications: Shih, B., Lathrop, E., Adibnazari, I., **Martin, R.**, Park, Y.-L., Tolley, M.T. (2020), "Classification of components of affective touch using rapidly manufacturable, soft, sensor skins", in 2020 IEEE-RAS International Conference on Soft Robotics (ROSO20), in press