## Mohamed Emish

217 North Catalina Street Los Angeles, CA 90004

moemish.com emishmo@gmail.com linkedin.com/in/MohamedEmish github.com/mohemish9 (909) 285-5914

## **SUMMARY**

Software Engineer seeking full-time position. Skilled with various **Data Engineering** and **Data Science** tools and equipped with PM-oriented teamwork skills. I designed and implemented multiple data **ETL** tools and scripts, trained ML models, collected and analyzed BI and UI insights and architected different solutions on **AWS**.

## TECHNICAL SKILLS

#### **Programing**

**Advanced** SQL, Python & Pandas **Intermediate** Java, R, C++, git, Javascript

## **Software Engineering**

Cloud Computing (AWS), RESTful APIs, OOP, Docker, Agile(Scrum)

#### **Data Science & Data Engineering**

TensorFlow, Kares, H2O, Extract, Transform Load (ETL), EDR Design, Hive, Spark, MongoDB, Tableau, Excel (Advanced), Image Classification, NLP

#### **EDUCATION**

## Claremont McKenna College, Claremont, CA

May 2021

Bachelor of Arts, Computer Science

 Relevant Coursework: Data Structures, Algorithms, Software Development, Neural Networks, Machine Learning with Neural Signal, Probability, Statistics

## **OTHER EXPERIENCE**

Harvey Mudd College
Jan 2020 - Present
Neural Networks Teacher Assistant
Murty Sunak Quanitative and
Computing Lab Aug 2019 - Present
Math and Computer Science Tutor

### EXPERIENCE

### Apple Inc., Cupertino, CA

Feb 2020 - Aug 2020

API Product Management Intern

- Wrote SQL queries (Hive, Spark, Oracle and Presto) and Python scripts (Pandas) to create an extensive investigation of user interactions patterns and drive BI insights
- Reduced the number of reported production bugs by analyzing API calls logs using complex SQL and Python scripts then communicating to engineering teams a detailed description of the issues
- Investigated and proposed a solution for bottleneck in batch and real-time data pipelines ingestion SLA that prevents timely processing of clients' data
- Led data quality assurance for SQL queries that run automatically to generate user-interfacing BI reports
- Documented API endpoints and updated API specification using internal CMS
- Coordinated between core engineering team, E2E quality assurance,
   marketing and sales teams to deploy and launch a new backend feature

# Claremont Graduate University, Claremont, CA Feb 2019 – Dec 2019 Data Analyst Fellow

- Built an AWS infrastructure to connect Ruby and Rails API to multiple data sources via AWS S3, Athena, and Glue Catalogs
- Designed and implemented end-to-end data extract, transform and load pipeline to ingest survey and event datasets from disparate data sources
- Designed and populated SQL database from scratch allow easy ingestion of structured data by SQL client
- Featured-engineered and created ML-trainable dataset by developing data
   ETL and cleaning scripts for +10M data-points from disparate data sources
- Increased variance explained in the data using PCA by cleaning event and survey datasets using automated ELT pipeline

## **PROJECTS**

### **Clinic Program at Galaxy Semiconductor Intelligence**

- Architected cloud deployment for an Angular application with SQL database using **Docker**, **Terraform**, **AWS ECR**, **EC2**, **S3**, **Athena**, and **Glue Catalogs**
- Improved faulty silicon wafers detection by converting relational data into images and then using DBSCAN and a neural network and Fast Fourier transform (FFT)

#### OOP Programing using Python, C++, Swift and Java

- Developed Swift App frontend and linked the backend to Spotify iOS SDK
- Created a containerized application in Streamlit and implemented the backend of Connect 4 game in Python OOP
- Implemented efficient spell checker using hash tables in C++ OOP
- Designed and implemented a GUI for a game in Java OOP

#### LSTM, RNN and CNN using Tensorflow

 Built various types of neural networks using TF, Kares, and H2O to perform image classification, sentiment analysis and time series forecasting