PARIN SHAH

Los Angeles, CA|psshah@usc.edu|(213) 285-8984|github.com/Parin09|linkedin.com/in/parin-s-shah|parin09.github.io/portfolio/|Tableau

EDUCATION

University of Southern California, Los Angeles	**Aug 2021-May 2023**
Candidate for Master's in Computer Science (Data Science)	GPA: **4.0/4.0**

Relevant Coursework: Analysis of Algorithm, Foundations of Artificial Intelligence, Data Mining, Applied NLP

Mukesh Patel School of Technology Management and Engineering, NMIMS, Mumbai	**Aug 2016-May 2020**
Graduated as Bachelor of Computer Engineering with Distinction (Merit List)	**83.5%**

Relevant Coursework: Data Structures, Database Management Systems, Data Warehousing and Mining, Artificial Intelligence, Business Viz

PROFESSIONAL EXPERIENCE

Unity Technologies, SF | Business Intelligence Engineer Intern　　　　　　　　　　　　**May 2022-Aug 2022**
- Designed an **ETL** pipeline in **Airflow** to identify customers using Unity Ads by combining several datasets.
- Improved overall coverage over previous ETL from 2% to **65%** leading to **1Mn+** new customers being identified.
- Identified a **63%** increase in revenue attributed to publishers using Unity to build games.
- Refactored and optimized the **LookML** codebase leading to increased modularity, reduced merge conflicts and over **4x** faster content validation times.
- Technologies used: GCP, BigQuery, SQL, Looker, LookML, Apache Airflow, Github.

Limechat, Mumbai | Data Scientist　　　　　　　　　　　　**Jun 2020-Jun 2021**
- Devised a tool to label new intents using **clustering** and **active learning** reducing manual labeling time by over **60%**.
- Conducted **A/B** test to determine optimal number of products to be displayed. Incorporated the results leading to an increase in sales by **28%** on average across companies.
- Designed and implemented an ETL pipeline in python to process and upload over **50,000+** rows of semi-structured data per day from PostgreSQL server to product analytics tool (**Mixpanel**).
- Developed a custom analytics dashboard on Flask and VueJS displaying critical **KPIs** for each client with ability to download standard excel and pdf reports. Integrated caching algorithm using Redis as cache that led to **90%** faster loading times.
- Technologies used: Python, SQL, Mixpanel, Flask, VueJS, Azure, Gitlab, Postgres, Redis.

Birthvenue, Mumbai | Project Intern　　　　　　　　　　　　**Mar 2019-May 2020**
- Developed a universal rating platform for all types of cryptocurrencies and tokens available in the market based on financial and non-financial variables to help investors make decisions.
- Designed a **regularized regression** model display the ratings for **1100+** cryptocurrencies on website.
- Technologies used: Python, Flask, ReactJS, MySQL, AWS.

Oracle Financial Services Software Limited, Mumbai | Research Intern　　　　　　　　　　**May 2019-Jul 2019**
- Interlinked **LDAP** server in Kubernetes for authorization purposes. Automated manual formation of access roles in banking systems helping **save 10+** hours of work per client.
- Incorporated **OpenID** connect to fetch relevant roles from server. Authorized multiple users by assigning permission to roles with the help of **Role Based Access Control (RBAC)**.

TECHNICAL SKILLS

- Programming Languages and Databases: Python, SQL, SAS, C++, Postgres, Redis, MySQL
- Python Libraries: Matplotlib, Plotly, Pandas, Numpy, Scipy, Tensorflow, Keras, Sci-Kit Learn
- Platforms and software: AWS, GCP, Azure, Apache Airflow, Tableau, Looker, Docker, Kubernetes, CI/CD, Gitlab, Jira, Notion
- Big Data: Hadoop MapReduce, Apache Spark(PySpark), BigQuery
- Web Technologies: Flask, Django, VueJS, ReactJS, D3.js

ACADEMIC PROJECTS AND PAPER

Immersive Visualization in Medical Imaging: Reports 3D (Paper) | Python, Blender, Flask, VTK, Keras
- Constructed a web application to bridge the semantic gap between medical practitioners and laymen by leveraging the use of **Augmented Reality** (AR) as a graphically intensive solution.
- Devised novel algorithm for 3D **volumetric recreation** and **rendering** of organ. Generated 3D file to be viewed in AR.
- Achieved a **DICE** score of **87%** for segmenting HGGs (Brain Tumours) from MRI by applying U-Net CNN architecture.

Review of Credit Card Fraud Detection Techniques (Paper) | Python, Numpy, Sci-Kit Learn
- Implemented **Synthetic Minority Oversampling Technique** to generate synthetic dataset to improve size of minority class.
- Employed **logistic regression** to classify transactions and achieved a F1 score of **94%**, Recall of **99%** and Precision of **90%**.
- Analyzed currently existing credit card fraud detection algorithms based on various parameters such as pre-processing, complexity, computation time, accuracy and listed the advantages and disadvantages with a suitable use-case.

Recommendation System | Python, Spark, PySpark
- Designed a **hybrid recommender** system to predict the ratings by a user for a particular business on Yelp data.
- Achieved accuracy of **97.3%** by combining **item based collaborative filtering** and **model-based** recommendation systems.

LEADERSHIP AND INVOLVEMENT

- **Technical Head, ACM MPSTME -** Taught in workshops and mentored teams working in the domain of **Augmented Reality**.
- **SAS Certified Associate:** Programming Fundamentals using SAS 9.4.