

PREYASH PATEL

📞 562-939-8100 ✉️ preyashp2020@gmail.com [in preyashpatel7](https://www.linkedin.com/in/preyashpatel7) [github preyashpatel7](https://github.com/preyashpatel7)

EXPERIENCE

Tata Consultancy Services

Feb 2022 – Present

Developer

Atlanta, Georgia

- Designed and deployed LSTM-based forecasting model to predict future SLA performance using historical support metrics and operational logs, leveraging TensorFlow, BigQuery, and Vertex AI Pipeline, which improved forecast accuracy by 25%, and led to a 20% increase in customer satisfaction while avoiding \$500k in SLA-related penalties annually.
- Developed serverless automation scripts in python using Google Cloud Functions to trigger on specific events and synchronize data in business systems via APIs, enabling real-time insights for business teams through Looker dashboard.
- Built a scalable dynamic pricing recommendation pipeline using Collaborative-Filtering and Two-Tower model using KubeFlow on Vertex AI, reducing computational costs by 40% through data/feature drift monitoring and conditional model retraining. Conducted A/B testing by traffic splitting to validate model performance retention.
- Built end-to-end ML pipeline for churn classifier using XGBoost and Logistic Regression on historical enrollment, claims, and customer feedback data to identify members at risk and delivered insights through looker dashboard to CRM team, resulted in reduced churn rate by 5%.

New Jersey Institute of Technology

March 2021 – August 2021

Software Developer (student)

Newark, NJ

- Collaborated in an Agile team, participating in sprints, code reviews, and iterative development processes to meet project milestones.
- Upgraded Maven dependencies and springboot code to ensure compatibility with AWS services and enhance the security and performance of the application.
- Conducted thorough code reviews and implemented JUnit/Mockito test cases, enhancing code quality and reducing defect rates.

EDUCATION

New Jersey Institute of Technology

Jan 2020 – Dec 2021

Master's in Computer Science

Newark, NJ

Parul University

June 2015 – May 2019

Bachelor's in Computer Science

Gujarat, India

PROJECTS

Recommendation System | TensorFlow, Vertex AI, Vector Search, Google Cloud

Sep 2024

- Build end-to-end ML pipeline using KubeFlow for recommendation system on Book and MovieLens dataset, leveraging Collaborative Filtering, Two-Tower model and contextual bandits (LinUCB).
- For Two-Tower model, deployed Query Model to Vertex AI endpoint to get user embedding and used Vertex Search (ANN) to enable rapid retrieval of personalized recommendations.

Fraud Detection | Anomaly detection, TensorBoard, BigQuery, AutoML

March 2024

- Developed a fraud detection system for Medicare and credit card data using KNN and XGBoost to identify anomalous transactions.
- Performed EDA with correlation analysis, distribution visualization, and outlier detection techniques to uncover insights. Addressed class imbalance using under-sampling of the majority class and class weight adjustment during model training.

SKILLS

Languages & Frameworks

Python, Java, JavaScript, HTML, CSS, Bash, TensorFlow, PyTorch, Pandas, Matplotlib, Sklearn, KubeFlow, Spring, Hibernate

Version Control & Cloud Tech

Gitlab, SVN, Bitbucket, Google Cloud, AWS, Oracle Cloud

Databases

SQL, BigQuery, MongoDB, DB2

Tools

Jupyter, Visual Studio, Eclipse, Spring Tools Suite, Anaconda, PyCharm

Machine Learning

Regression/Classification, Feature Engineering, Clustering, HPC, NLP, Recommendation System, Generative AI

CERTIFICATE

Professional Machine Learning Engineer by Google Cloud

MLOps, Vertex AI, Generative AI, Cloud Storage, BigQuery, Batch/Online predictions, Vertex Search, AutoML

Cloud Digital Leader by Google Cloud

Cloud Billing, VPC, Pre-built APIs