

# Tejal Anavekar

Los Angeles, CA | (213) 783-9056 | [anavekar@usc.edu](mailto:anavekar@usc.edu) | [LinkedIn](#) | [Github](#)

## EDUCATION

### University of Southern California

*Master of Science in Computer Science*

Los Angeles, CA

Aug 2024 – May 2026

- Relevant skills: Analysis of Algorithm, Database management, Applied Natural Language Processing

### Fr.C.Rodrigues Institute of Technology

*Bachelor of Engineering in Information Technology*

Mumbai, India

Jul 2020 – Jun 2024

- Relevant skills: Operating Systems, Computer Networks, Machine Learning, Artificial Intelligence, Data Science, Data Mining, Big Data

## TECHNICAL SKILLS

**Programming Languages:** Python, C, C#, HTML, CSS, Javascript

**Framework:** ReactJs, NodeJs, ExpressJS, TensorFlow, Bootstrap

**Libraries:** PyTorch, Scikit-learn, Keras, OpenCV, Pandas, NumPy, Seaborn, Matplotlib

**Databases:** SQL, Mongo DB, PostgreSQL, Firebase

**Tools/ Technologies:** AWS (EC2, S3), Power BI, GCP

## EXPERIENCE

### Software Developer

*Institute for Creative Technologies*

Sept 2024 – Present

Los Angeles, CA

- Developed complex **SQL** queries and automated end-to-end **ETL** workflows, including data extraction, cleansing, transformation, and loading into finance data pipelines, streamlining the reporting processes and improved efficiency by 40%
- Implemented and Executed **C#** automation solution that replaced manual Excel workflows, reducing report generation time by 60% and deploying automation solution to a live environment
- Constructed **8** interactive dashboards in Power BI to monitor key financial KPIs, integrating real-time backend data streams

### Data Engineer Intern

*Meta*

June 2025 – Aug 2025

Burlingame, CA

- Engineered **4** end-to-end scalable data pipelines on the **Reality Labs Privacy and Platform Foundations team**, enabling real-time analytics and AI readiness dashboards for billions of rows of user data
- Automated pipeline generation and data validation for AI readiness dashboards using **Python** and Meta internal tools guaranteeing scalable and dependable data workflows
- Optimized AI readiness metric computation logic, which was adopted by **3+** cross-functional teams, enhancing reporting transparency and driving more consistent performance tracking

### AI Engineer

*Tata Institute of Fundamental Research*

Jun 2022 – Apr 2023

Mumbai, India

- Applied advanced image segmentation and **SIFT-based feature extraction**, boosting classification precision by **25%** and enabling more precise data interpretation
- Trained and deployed **Convolutional Neural Networks** (ResNet, VGG variants) to automate image classification tasks, improving accuracy and cutting processing time by 30%
- Designed modular **2** preprocessing pipelines to standardize image resolution and brightness for robust ML training across diverse datasets and imaging conditions

## PROJECTS | PUBLICATIONS

### Query Bot | NLP, BERT, LSTM, Pytorch

Jan 2025 – Apr 2025

- Led the development of a custom seq2seq model combining **BERT encoders and LSTM decoders** with schema-aware attention for translating natural language questions to SQL queries. Achieved 91.8% execution accuracy and 82.2% exact match on Spider dataset

### GeoForecast - Weather App | MERN Stack, Flask, Swift, GCP

Aug 2024 – Dec 2024

- Built and deployed a cross-platform weather app with modular frontend-backend architecture (**React.js, Node.js, MongoDB**), hosted on **Google Cloud**. Integrated Google and Tomorrow.io APIs for geolocation, weather prediction and daily forecasts, achieving 93% location accuracy and increasing daily retention by 35%

### Smart Surveillance System for Intrusion Detection | SSD, YOLO, Open CV, Tensorflow

Jul 2023 – Apr 2024

- Devised and Implemented AI-powered smart surveillance system utilizing **SSD and YOLO** algorithms for real-time leopard detection across 500 meters, achieving 92% detection accuracy with false positive reduction of 30% | [Research Paper](#)

### Plagiarism Detection System | Open CV, Django

Jan 2023 – Apr 2023

- Built a web-based **NLP tool** to detect content similarity using **TF-IDF** and **Cosine Similarity** with text preprocessing such as stemming, lemmatization increasing plagiarism detection accuracy by 40%