

# Mayur Jain

California, USA - (562) 254-7817

mail/mayurjain333@gmail.com - linkedin/mayurjain007 - Web Resume

## Education

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**California State University**, Long Beach, CA, USA

*August 2023 – May 2025*

Master of Science in Computer Science

**Guru Tegh Bahadur Institute of Technology**, Delhi, IN

*August 2015 – May 2019*

Bachelor of Technology in Information Technology

## Skills

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**Technical : Python, PySpark, SQL, Bash, Git**, R, Java, C++, Scala, JavaScript

**Data Science & Analytics :** Pandas, NumPy, Matplotlib, Seaborn, Power BI, Tableau, Google Analytics, Feature Engineering, Data Preprocessing, ETL Pipelines, KPI Design & Optimization

**Machine Learning & AI :** Scikit-learn, TensorFlow, PyTorch, OpenCV, NLP, Recommendation Engine, Anomaly Detection, Time-Series Analysis, Classification, Clustering, Forecasting

**Data Engineering :** Apache Spark, Hadoop, Kafka, Airflow, Azure Data Factory (ADF), DataBricks, Redshift, ETL Pipelines, Data Integration, Data Governance

**Cloud & Deployment :** AWS, Azure, GCP, Docker, Kubernetes, CI/CD Pipelines, Jenkins, UrbanCode Deploy, SonarQube

**Tools :** Zaidyn, Dataiku, Collibra, RWE, ServiceNow, DataPower, Message Broker, JIRA, Kanban Board, VSCode, Excel, Linux, Postman

## Professional Experience

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### Student Assistant

*California, US*

**California State University, Long Beach**

*April 2024 – Present*

- Automated data processing tasks using excel scripts, reducing manual effort by 30% and improving the accuracy of student balance checks for over 500+ students weekly.
- Managed and maintained 10,000+ student and staff records, ensuring 99% data accuracy and supporting administrative staff with accurate data entry and timely reports for decision-making.
- Successfully completed 5+ special projects within deadlines, improving operational efficiency and contributing resolution of 50+ inquiries per week while providing consistent service to over 1,000 students and staff members.

### Business Technology Solutions - Consultant

*September 2022 – July 2023*

#### ZS Associates

- Designed and implemented advanced patient care KPIs, such as patient retention and treatment success rates, improving healthcare service efficiency by **15%**.
- Provided actionable insights by analyzing clinical and operational data, enabling healthcare providers to improve patient outcomes and reduce hospital readmission rates by **20%**.
- Developed automated dashboards for hospital administrators, reducing manual reporting time by **40%** and enabling real-time monitoring of patient care metrics.
- Implemented real-time monitoring systems for patient vitals, enabling faster response times and reducing critical event rates by **30%**.

### Data Scientist

*July 2019 – September 2022*

#### Tata Consultancy Services

- Developed and deployed a machine learning-based credit card fraud detection system, improving fraud detection accuracy by **35%** and reducing false positives by **20%**.
- Researched, fine-tuned, and deployed efficient machine learning models, reducing model inference time by **25%** and enhancing system responsiveness in live environments.

- Conducted deep analysis of financial transaction data, uncovering patterns that strengthened anti-money laundering strategies and improved risk management effectiveness by **15%**.
- Successfully deployed machine learning models in a cloud environment, achieving **99.9% uptime**, ensuring scalability, and adhering to stringent regulatory standards.
- Engineered advanced features and automated data pipelines for datasets exceeding **100 million records**, enabling **50% faster fraud detection pipelines**.

## Software Development Engineer

*August 2018 – July 2019*

### ClickIndia Infomedia

- Managed a Linux-based Live Staging Environment, ensuring **99.9%** uptime, real-time debugging, and post-production data maintenance. Automated server tasks using shell scripting & cron jobs, reducing manual efforts by **50%**.
- Optimized code collaboration using Git, GitLab, and Azure Repos, managing 100+ pull requests and ensuring **99%** merge success rate with structured branching strategies (feature branching, hotfixes, and merging best practices)
- Automated deployment workflows, reducing manual deployment errors by **70%** and enabling faster roll-backs less than 2 minutes in case of failures, ensuring smooth CI/CD integration and minimal downtime.

## Projects

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### Real-Time Credit Card Fraud Detection System

*ZS Project*

[https://github.com/mayurjainf007/Credit\\_Card\\_Fraud\\_Detection](https://github.com/mayurjainf007/Credit_Card_Fraud_Detection)

*Description:* Project demonstrates the performance of real-time credit card fraud detection using Apache Kafka, Spark Streaming, and Flask. The system dynamically adapts to schema changes in the input dataset, detects fraudulent transactions in real-time, and displays the results on a web dashboard.

### Code Smell Detection

*CSULB Project*

<https://github.com/mayurjainf007/CodeSmell>

*Description:* Code smells are indicators of potential structural weaknesses in code that could lead to maintainability and scalability issues. While not bugs, they make the code more complex and harder to modify. Detecting code smells manually is both time consuming and subjective. Therefore, automated solutions are essential, especially in large-scale projects.

### Emotion and Gender Classification

*GTBIT Project*

<https://github.com/mayurjainf007/Emotion-Gender-Classification>

*Description:* Developed a real-time video analysis system using neural networks to classify emotions in seven categories, achieving 89% accuracy. Enhanced classification speed by 25% with optimized algorithms (LSTM, SVM).

### Face Detection

*Personal Project*

<https://github.com/mayurjainf007/Face-Detection>

*Description:* Designed a deep learning model for multi face detection, achieving 95% accuracy and reducing false positives by 30% through hyper parameter tuning.

### Twitter Sentiment Analysis Pipeline

*TCS Project*

<https://github.com/mayurjainf007/Apache-Airflow-and-Machine-Learning>

*Description:* Built an Apache Airflow pipeline for processing Twitter data, utilizing AWS for storage and retrieval, showcasing expertise in end-to-end data engineering.

## Certifications

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### Microsoft Azure Certification

<https://www.credly.com/users/mayur-jain.5407c33e>

### Google Cloud Platform Certification

[https://googlecourses.qwiklabs.com/public\\_profiles/955c47df-2ca5-4f1e-ab53-465b0889821f](https://googlecourses.qwiklabs.com/public_profiles/955c47df-2ca5-4f1e-ab53-465b0889821f)

### Python/Machine Learning (TCSion)

### Big Data/ Hadoop (TCSion)

**Core + Advanced Java:** Exception Handling, Threading, Java Script