

# GARIMA MATHUR

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Results-driven professional with a solid background in software engineering and data analytics, skilled at transforming complex datasets into strategic insights. Proven ability to develop innovative, data-driven solutions that drive business growth and operational efficiency.

- **Technical Skills:** Exploratory Data Analysis, Statistical Exploration, Data Visualization, A/B Testing
- **Technical Tools/Languages:** C++, Java, SQL, Python, Excel, C#, Ubuntu

## EDUCATION

### University of California, Davis

*Master of Science in Business Analytics*

- **Highlighted Coursework:** Advance Statistics, Machine Learning, Data Management

San Francisco, USA

Aug 2024 - July 2025

### Jai Narain Vyas University

*Bachelor of Engineering in Electronics and Computer Engineering*

- **Highlighted Coursework:** Data Structure & Algorithms, Operating System, Artificial Intelligence

Jodhpur, India

Aug 2017 - Aug 2021

## PRACTICUM EXPERIENCE

### ExPrep

*Project Manager / Data Analyst*

- Crafted **market research surveys** for instructors and students, ensuring grading tools and dashboards were tailored to the unique needs of both instructors and students.
- Developed **SQL and Tableau** dashboards to provide actionable insights for over 80k+ students from 80+ universities.
- Collaborated with stakeholders to define key performance indicators, enabling data-driven decisions and improved user engagement.
- Conducted **SQL-based analysis on 10k+ grading records**, identifying key performance trends that informed product enhancements.
- Conducted statistical analysis on survey data to extract key metrics such as trends and distributions, generating insightful reports including user needs and product optimization.
- Partnered with stakeholders and led a team of five to **extract, transform, and visualize data** for real-time insights using Tableau.

San Francisco, USA

Aug 2024 - July 2025

## PROFESSIONAL EXPERIENCE

### Accolite Digital

*Senior Software Engineer*

- Upgraded **Mesa 3D Graphics Library** from version 7.8 to 21.2.3, compiling APIs and dynamic link libraries like OpenGL, OSMesa and Glu/Glut ensuring seamless performance of existing functionality for an interactive 3D Linux database application.
- Enhanced system security by addressing a **critical vulnerability** through improved **validation of COM** (Component Object Model) calls using C# and C++, while **encrypting the existing KIX** file and implementing tokenization to securely handle and store sensitive information, minimizing unauthorized access risks over **40** criteria.
- Enhanced the existing **User Manager GUI** to support newly introduced MariaDB v10.5 privileges, **improving** data access management for over **2.5M users**.
- Created new database scripts for software which **compiled database design to support 2022 server** environment with existing functionality of validation logic.
- **Implemented** a feature allowing users to customize history table names, aligning with their data modeling preferences in **Azure SQL DB and SQL Server**.
- **Integrated software support** for the parameter handling issue during reverse engineering of tables with **more than 30 characters**, ensuring accurate data mapping for table name **for over 3M users**.

Gurugram, India

Sept 2021 - July 2024

### Celebal Technology

*Full Stack Developer Intern*

- **Developed a dynamic event management dashboard** using **React** and **CoreUI**, implementing **Json Web Token (JWT) authentication** for secure, role-based access (admin, participant, volunteer).
  - **Optimized page load times by 40%** through the implementation of JWT and integration of **16 APIs** for real-time data fetching and asynchronous rendering, enhancing performance and user experience.

Jaipur, India

Jan 2021 - July 2021

## PROJECT

### Ace the Space

*ML Engineer*

- Developed a machine learning-based resume scoring and recommendation system using **BERT embeddings and Random Forest classifier**, achieving approx. **50% accuracy** and over **75% precision**.
- Pre-processed textual data from over **10,000+ job description** and over **500+ resumes** by applying tokenization, lemmatization, and stopword removal to enhance feature quality for model training.
- **Implemented cosine similarity** for ranking job profiles, providing real-time, high-precision job recommendations based on resume content and job dataset.

Jan 2025 - Mar 2025

### FrenzyCompass

*Data Engineer*

- **Developed a Python application** using Google Map API and Ticketmaster API to locate restaurants, grocery and upcoming events within specified area and radius.
- Optimized API requests and data handling processes, improving system performance, and **reducing search efforts by 50%** leading to significant increase in user engagement.

Jan 2025 - Feb 2025