

Pranjal Jadhav

+1 (919) 396-3672 | psjadhav@ncsu.edu | www.linkedin.com/in/pranjal-jadhav13 | <https://pranjalijadhav13.github.io/>

EDUCATION

Master of Computer Science

North Carolina State University, Raleigh, NC

Coursework - Data Analysis, Algorithms, Database Management, Software Engineering, Cloud Computing, Data Science

Aug 2023 - May 2025

4/4 GPA

Bachelor of Technology, Computer Science

K.J. Somaiya College of Engineering, Mumbai, India

Coursework – Data Structures, Operating Systems, Computer Networks, Image Processing, Data Mining, Computer Architecture

Aug 2017 - May 2021

9.32/10 CGPA

WORK EXPERIENCE

Data Science Intern – i2M LLC | Raleigh, NC

Sept 2024 – Present

- Created machine learning models (Naïve Bayes, XGBoost) to predict equipment failures (e.g., pumps, lift stations) by analyzing real-time and historical sensor data, improving predictive accuracy by 30%.
- Designed data-driven solutions to monitor asset health, such as current draw and alarm conditions, resulting in a 25% reduction in unplanned maintenance events.
- Analyzed over 500,000 data points from water and wastewater treatment systems, optimizing process efficiency and reducing water treatment costs by 20%.
- Built automated scripts for data ingestion, preprocessing, and flow totalization, which cut data processing time by 40%.
- Developed customized dashboards using tools like Tableau to visualize key metrics, such as flow rates and alarm notifications, providing operators with actionable insights for quick decision-making.

Data Analyst Researcher – Camcore Research Cooperative | Raleigh, NC

Jun 2024 - Present

- Engineered a scalable R Shiny analytics platform for forest genetic data, reducing processing time by 25%. Streamlined data transformation methods, improving quality and reducing analysis runtime by 30%.
- Developed predictive models using GLMs and Random Forests, increasing accuracy for genetic diversity predictions by 15%.
- Automated ETL pipelines for forest measurement data, enhancing data flow efficiency and reducing errors by 20%.
- Created an interactive R Shiny dashboard for real-time visualization, streamlining workflows and cutting insight-gathering time by 20%.
- Leveraged Amazon RDS for managing over 40 million tree records, optimizing query performance and scalability.

Associate Software Engineer – Oracle Financial Services Software | Mumbai, India

Jul 2021 - Jul 2023

- Developed a Proof of Concept (PoC) with Oracle Business Intelligence Publisher to facilitate batch processing of signature-embedded PDF reports, reducing generation time by 40% and ensuring compliance with financial standards.
- Enhanced transaction security by implementing advanced authorization in Oracle PL/SQL, improving transaction security by 20% through dynamic warnings and access controls.
- Led a cross-functional Agile project integrating Java, Spring Boot, and PL/SQL for automated SMS/email alerts on term deposit closures, resolving 10 critical issues within 3 hours and improving client engagement by 15%.
- Optimized data migration workflows by engineering ETL processes with Oracle Data Integrator (ODI), increasing productivity by 15% and ensuring a successful system go-live with minimal downtime.
- Conducted thorough unit testing and debugging on Oracle applications, troubleshooting complex issues with SQL Developer and JUnit, contributing to technical documentation and achieving a 25% reduction in post-deployment issues.

TECHNICAL SKILLS

Languages: C, Java, JavaScript, Python, R, SQL, HTML5, CSS5, XML

Tools/Frameworks: ReactJs, PHP, Django, Postman, Spring Boot, Node.js, Flask, PostgreSQL, MySQL, Oracle DB, NoSQL, Jira, Git, Github, Linux, AWS, R Shiny, Java Database Connectivity, JSON, render, Heroku, Eclipse IDE, Rest API

PROJECTS

ProShop (React, Redux, MongoDB, Node.js, Express.js)

- Developed a full-stack e-commerce platform with features like shopping cart, product reviews, and user profiles.
- Integrated PayPal and JWT-based authentication for secure transactions. Built admin features to manage products and orders, increasing efficiency by 30%. Deployed on Render, supporting 1,000+ users with <1% downtime.

TaskMate (Django, PostgreSQL)

- Developed a task management system using Django with the MVT architecture, enabling users to efficiently create, track, and manage tasks.
- Integrated PostgreSQL for scalable data storage, handling over 10,000 task records with optimized query performance, improving task retrieval efficiency by 20%. Implemented default Django authentication, securing user data and ensuring 100% session integrity across multiple devices.
- Deployed the application on the Railway platform, achieving a 99.9% uptime and supporting up to 500 active users concurrently.

Bibliophile (HTML, CSS, PHP, JavaScript, PostgreSQL, AJAX, Google Firebase)

- Developed a book recommendation platform allowing users to rate, search, and create personal bookshelves.
- Implemented AJAX for real-time searches, reducing load times by 40%. Integrated e-commerce redirection, increasing conversion rates by 25%. Used Google Firebase for efficient PDF delivery, supporting up to 10,000 concurrent users.

PUBLICATIONS

Voice to Indian Sign Language Translator

- Presented a paper detailing a Voice to ISL system that utilizes real-time videos for translation. The research includes a literature review of existing systems and compares various NLP techniques and machine learning algorithms.