

PANKAJ SHARMA

+1 (951) 712-9260 | pasha.sde@gmail.com | linkedin.com/in/pankajsharmabits | github.com/Pankaj4197s | pankaj4197s.github.io

EDUCATION

University of California, Riverside CA
Master's of Science in Computer Science

September 2024 - December 2025 (Tentative)
GPA: 4.0 / 4.0

Birla Institute of Technology and Science, Pilani, KK Birla Goa Campus, India
Bachelor of Engineering (Honors), Electronics and Instrumentation

August 2015 - May 2019
GPA: 8.29 / 10.0

WORK EXPERIENCE

JP Morgan Chase & Co., Mumbai | Software Engineer II

January 2022 - September 2024

- Modernized legacy Mule flows to scalable and robust Spring Integration, improving memory efficiency by 44% and eliminating application crashes. This enhanced system stability, improved code maintainability, and mitigated security risks by remediating vulnerabilities in packages like Spring Beans.
- Migrated PROD databases sizing 50 GB from Sybase ASE to MSSQL Server with no downtime.
- Modernized legacy applications to containerized workloads and migrated them from on-prem to Amazon Web Services(AWS EKS).
- Developed *Active Inventory Management* (AIM) Cash Optimization based on Signavio BDM that Cash Managers and Portfolio Managers use to actively manage residual cash on client accounts before the close of day.

JP Morgan Chase & Co., Mumbai | Software Engineer I

July 2019 - January 2022

- Collaborated daily with cross-functional tech and business teams enhancing operational efficiency and meeting critical deadlines.
- Designed a ReactJS frontend UI for AIM, facilitating investment of over \$1.6 billion in previously uninvested cash in 2022 by enabling more efficient asset management. The total invested cash volume in 2022 via AIM was \$188 Billion.
- Updated the authentication and authorization setup across micro-services to use OAuth2.
- Enhanced the CI/CD pipelines to the latest industry standards using Harness.

The Humsafar Trust | Force for Good | JPMC, Mumbai | Full Stack Developer (Volunteer)

October 2019 - September 2020

- Developed a cross-platform application for The Humsafar Trust - An NGO for LGBTQIA+, expanding reach to over 500 users by leveraging Ionic, Cordova, Spring Boot, and MySQL.
- Enhanced the app to support Social Feed for LGBTQ Events, adding these events to the calendar & setting reminders and SOS integration with calling and Navigation support that can be used in emergencies.
- Engineered the app to offer resources ranging from Legal, Medical, and Social support for the LGBTQIA+ community in India.

Retailio, Mumbai | Software Engineering Intern

January 2019 - June 2019

- Enhanced frontend UI for Retailio's Retailer and Distributor web panels, improving user navigation and contributing to a 20% increase in daily transactions. I also added critical functionalities to the internal ADMIN panel.
- Implemented backend API to support ERP integration, MIS report generation, and synchronization of OMS payments.
- Worked on implementing batch jobs that helped reduce manual intervention in Payment Processing. Created UI in AngularJS where users can upload Payment Information in Excel and trigger batch jobs to process the same.

Forest Research Institute(FRI) | Forest Department | Government of Rajasthan, Jaipur | Research Intern

May 2017 - July 2017

- Analyzed the R&D department's use of Quantum Geographic Information System (GIS) and Management Information System (MIS).

PROJECTS

Pneumonia X-Ray Classifier

October 2024 - November 2024

- Used various deep-learning techniques like Transfer Learning with Pre-trained Convolutional Neural Network (ResNet), Custom CNN models and Vision Transformers (ViT) to identify potential Pneumonia cases based on X-ray images

Berkeley AI Pacman Project

September 2024 - October 2024

- Implemented and optimized search algorithms like DFS, BFS, UCS, and A* that Pacman uses to solve different mazes.

Developed a Mobile Application to track COVID-19 cases in India as a Side Project using Web Scrapping

March 2021

Application of Index Calculus Method for breaking Cryptosystems

August 2018 - November 2018

- Researched the Index calculus method and then analyzed it thoroughly to solve the Discrete Logarithm Problem.

SKILLS

Languages: Java, C++, C, Python, Javascript, TypeScript, SQL, Groovy

Tools & Frameworks: Spring, React, AWS, Terraform, Kubernetes, Oracle, MSSQL Server, Sybase ASE, Docker, Spinnaker, Harness, CockroachDB, Splunk, Gremlin

Relevant Coursework: Design and Analysis of Algorithms, Artificial Intelligence, Machine Learning, Data Mining Techniques, Cryptography, Discrete Mathematics, Probability & Statistics, Computer Programming, Operating Systems

Certifications: AWS Certified Cloud Practitioner, Certificate in AI - JPMC AI Research, Certificate in Networking Management by Nettech

AWARDS AND ACHIEVEMENTS

- 'Best Use of IT in Treasury and Capital Markets' by Informaconnect in December 2022
- Merit cum Need (MCN) Scholarship, BITS Pilani
- 'Circle Of Excellence Award' in the Above & Beyond Category at JPMC for best performer of the year in 2020.