

Sai Koushik Pentyala

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EDUCATION

Master of Science, Software Engineering

Aug 2022 - May 2024

San Jose State University, San Jose, CA

Courses: Enterprise Software Platforms, Enterprise Application Development, Cloud Technologies, Data Mining

Bachelor of Technology, Computer Science and Engineering

Aug 2015 - May 2019

Indian Institute Of Information Technology, Vadodara, Gujarat, India

Courses: Operating Systems, Data Structures, Design and Analysis Of Algorithms, Artificial Intelligence, Distributed Systems

PROFESSIONAL EXPERIENCE

System Engineer - Full Stack Developer, TCS, Client - ICICI, Hyderabad

Jul 2019 - Jul 2022

- Spearheaded the digitization of a bank's home loan process with Spring Boot microservices and Angular framework, resulting in reducing average application process time for clients from 10 days to a mere 12 hours.
- Engineered a robust data infrastructure using Amazon RDS with MySQL and JDBC, efficiently storing documents on Amazon S3. Seamlessly combined Apache Kafka to enhance microservices communication.
- Orchestrated the enhancement of the application for scalability, integrated bank Security protocols for robust authentication.
- Designed CI/CD pipeline with Jenkins, Docker, and Kubernetes, ensuring consistent uptime and achieving zero-downtime deployments. Implemented Redis Caching to accomplish 30% speed in data retrievals.
- Managed a digital application for ICICI's two-wheeler loan process, combining third-party APIs and optimizing the application to reduce production defects from 15% to 0%.
- Led a two-person team that integrated React frontend with RESTful APIs, empowering users to extract multiple data attributes. Managed applications that handled 10,000 daily requests while maintaining consistent performance levels.
- Collaborated with the operations team to understand business needs, and promptly address production issues, and contributed to projects within the complete Software Development Life Cycle in an Agile-driven environment.

Software Engineering Intern, Transport Hub, Mumbai, Maharashtra

Jan 2019 - May 2019

- Engineered an alert system to send live notifications to clients, allowing organizations to regulate temperature conditions using IoT sensors. Resulted in a 15% reduction in temperature-related losses and a 25% decrease in client complaints.
- Performed advanced clustering algorithms to analyze transport vehicle patterns. By identifying optimal clusters and intelligently assigning delivery routes, accomplished an impressive 30% reduction in delivery time. Observed a substantial 20% reduction in transportation expenses for clients, ultimately increasing revenue growth.

ACADEMIC PROJECTS

- Inventory Marketplace: Constructed a web-based platform leveraging NodeJS and ReactJS where retailers can sell products past the Sell-by Date to buyers at cut-down prices, with an option to donate to charity. The platform contributes towards diminishing food waste and preventing edible items from ending up in landfills.
- Othello game using AI (Reinforcement Learning): Engineered an AI bot capable of playing with human players. Implemented Reinforcement Learning and Monte Carlo tree search algorithm to achieve 95% accuracy.
- Online Pharmacy (Web Application): Web application for pharmacies where buyers and sellers interact with each other without any third-party involvement. Partnered with local pharmacies to deliver medicines with minimal human effort.

SKILLS SUMMARY

- Programming Languages: Java, Python, R, C, JavaScript, Typescript, SQL
- Web Technologies: XML, CSS3, HTML5, JQuery, MVC, Bootstrap, RESTful, AJAX, JSON
- Frameworks: Spring Boot, Angular, Hibernate, TensorFlow, LangChain, OpenAI, React.JS, NodeJS
- Databases: MySQL, MongoDB, Amazon DynamoDB, Amazon RDS, PostgreSQL
- Tools: Eclipse, JIRA, PostMan, GIT, Jenkins, Docker, Kafka, PuTTY. AWS (EC2, ECS, S3, RDS, Lambda)

LEADERSHIP

- Organized workshops and mentored students in skill development as a Placement Committee member at IIIT.
- Captained the college volleyball team and represented college in various events.
- Received multiple awards from TCS for being a critical resource in the project.