Rishi Sanjaykumar Patel

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Education

Indiana University, Luddy School of Informatics, Computing, and Engineering *August 2023 - May 2025*
Masters of Science in Computer Science Bloomington, IN, USA
Coursework: Applied Algorithms, Software Engineering, Elements of Artificial Intelligence, Time Series Analysis, NLP

Charotar University of Science and Technology August 2019 – April 2023
Bachelor of Technology in Information Technology Anand, GJ, INDIA
Coursework: Data Structures and Algorithms, Operating System, Computer Networks, Machine Learning, Database Management System

Skills and Expertise

Programming Languages: Java, JavaScript, PL/SQL, HTML, CSS, Python, PHP, COBOL.
Frameworks & Tools: Reactjs, Nodejs, Flask, Power BI, Docker, Kubernetes, Agile Development, GitHub, Jenkins, CI/CD.
Technologies: REST APIs, Machine Learning, SIT, Regression Testing, UAT, Generative AI.

Internships

Mainframe Application Developer Intern (SharpGurus-USA Inc.) June 2024-Present

- Participating in the full lifecycle of mainframe application development, including analysis, design, coding, testing, and support, to enhance system functionality and performance.
- Writing and debugging COBOL code, managing JCL scripts for efficient batch processing, and utilizing DB2 to execute SQL queries for effective data management and analysis.
- Ensuring secure software development practices by integrating SSDLC methodologies, conducting regular security reviews, and implementing secure coding standards to protect data integrity and confidentiality.

Data Analyst Intern (Saint Louis University) (Excelerate) June 2023-July 2023

- Led a 4-week Data Visualization project, managing a team to develop interactive dashboards using Power BI, facilitating improved data comprehension. Utilized SQL and Python for data extraction, transformation, and loading (ETL), ensuring high data accuracy and consistency across various data sources.
- Conducted data modeling to structure and organize data effectively, supporting efficient data engineering processes.
- Enhanced skills in data storytelling and presentation, effectively translating complex datasets into actionable insights for stakeholders, improving decision-making processes.

Projects

Orbit Guardians: Hackathon Project June 2024 – July 2024

- Conceptualized and developed "Orbit Guardians," a comprehensive platform designed to assist citizens in escaping and protecting themselves from an alien invasion on Planet Hackunia.
- Developed a multi-functional web application using React.js for the frontend and Node.js for the backend. Implemented various features including real-time alerts, interactive maps, health resources, and communication channels. Integrated APIs and used web sockets for real-time data updates and notifications.
- Conducted extensive unit testing to ensure the reliability and functionality of the application's various components, identifying and fixing bugs early in the development process.

Check: Patient and Health Insurance Management Portal August 2023 – December 2023

- Engineered the backend of the portal using Flask in Python, ensuring efficient data processing and seamless integration with the frontend.
- Utilized strong problem-solving and analytical skills to troubleshoot and optimize system performance, ensuring reliability and efficiency. Communicated effectively with team members and stakeholders, providing clear documentation and updates on project progress, which facilitated collaboration and timely completion of tasks.
- Developed multiple features such as profile editing, doctor appointment booking, fees payment, feedback options, and insurance plan details using React JS and PostgreSQL, enhancing user experience and functionality.

AquaIntelli: Precision Agriculture Irrigation System September 2022 – November 2022

- Designed and trained a machine learning model to predict precise water requirements for crops, utilizing algorithms such as linear regression, decision trees, neural networks, and random forests, which significantly enhanced irrigation efficiency and resource management. Leveraged cloud technologies including IaaS, PaaS, and DaaS to enhance the scalability, reliability, and efficiency of system.
- Integrated real-time data analysis from IoT sensors (temperature, humidity, soil moisture, wind speed, solar radiation, water level) with the system, employing PostgreSQL for robust data storage and management, demonstrating the practical application of data science techniques in agriculture.
- Developed a user-friendly interface to monitor and control irrigation processes remotely, allowing farmers to manage water supply efficiently and receive alerts about field conditions, ultimately improving crop quality and reducing water usage.