



Rahul Dey

Senior Engineer



Professional Summary

A dedicated Full Stack Developer, with 3 years of experience in web application development and system automation, Rahul possesses expertise in API design, Clean architecture, and data management. With technical skills in .NET Core, Angular, React, and Node.js, he has demonstrated the ability to deliver innovative solutions. He is recognized for his contributions to team success and collaboration, significantly enhancing procurement efficiency for a major e-commerce client, and showcasing the ability to create impactful technology solutions.

He is currently working on a purchase order automation system for an established e-commerce platform specializing in retail pharmaceuticals, involved in training Azure models, creating Azure Functions for data extraction and processing, and ensuring seamless integration with the client portal to provide detailed order insights, ultimately aiming to streamline procurement processes for the client.

Education

- Bachelor of Technology, Computer Science and Engineering, Ramkrishna Mahato Government Engineering College, Purulia, West Bengal, India

Training and Certifications

- Master the OWASP Top 10

Skill Set

- Proficient in developing web applications using technologies such as .NET Core, Angular, React, and Node.js, with experience in both frontend and backend development
- Skilled in designing and implementing RESTful APIs using Clean architecture principles, ensuring modular design and separation of concerns while facilitating seamless communication between frontend and backend systems
- Experience in working with Cosmos DB and relational databases, including data modelling, query optimization, and maintaining data integrity through consistent operations
- Competent in developing automation solutions, end-to-end testing, unit testing, and implementing CI/CD pipelines to enhance deployment efficiency and application reliability

Programming languages

- C#.NET, .NET framework, .NET Core, ASP.NET, JavaScript, TypeScript, Kotlin, Node.js, C++

Web technologies

- CSS3, Web Forms, Angular, HTML5, MVC, Bootstrap, Tailwind CSS, ReactJS, Vue.js, Material UI

APIs and middleware

- Entity framework, REST, JSON, Web Services, Azure Function, Serilog, xUnit, GeoJSON, Google Maps API, .NET Core Web API, Express



Database	<ul style="list-style-type: none"> • SQL Server, SSMS, stored procedure design, data modelling and design, MongoDB, Cosmos DB, Redis, NoSQL, SQLite
Tools and platforms	<ul style="list-style-type: none"> • Jira, Visual Studio, Visual Studio Code, Postman, Azure Document Intelligence Studio, Azure Portal, Powershell, Virtual Machin, Ubuntu, ESRI, ArcGIS

Honors and Awards

- Caring cheerboard individual nomination



Recent Projects

Project name

Purchase Order Automation System

Client

An established e-commerce platform specializing in retail pharmaceuticals, dedicated to increasing operational efficiency and simplifying the procurement process through innovative automation solutions.

Duration

February 2024 – till date

Description

Project involved developing an AI-based purchase order processing application with a database backend. It provided a comprehensive range of functions, including order updates and new order creation, while enabling data access from the portal for detailed order information

Technology Stack

Azure Document Intelligence Studio, Cosmos DB, Git, Jira, .NET Azure Function App, C#, .NET Core, Order Cloud, Azure CI/CD, Microsoft Graph API, Angular, HTML5, CSS3, TypeScript, Node.js

Responsibilities

- Trained an Azure model for over 35 purchase order formats and tested the model to ensure accurate training results
- Developed Azure Functions to retrieve unread emails, extract data using Azure Document Intelligence, store the data in a database, process the purchase orders, and send success or error email notifications
- Integrated the system into the portal to provide order details, alerts, and information generated by the AI system during purchase order processing, including annotations from Azure Intelligence Service
- Performed end-to-end testing to ensure the Azure Function App and UI functioned correctly
- Managed support issues, including critical batch failures, and resolved them promptly
- Identified any bugs occurring in the application as well as fixed them
- Monitored event alerts and notified the relevant team, processing requests from end users
- Coordinated with the team to maintain stability in the production environment

Project name

API and Conflict Resolution Tool Development

Client

A resilient grid and energy services company.

Duration

September 2023 – January 2024

Description

Project involved developing an Application Programming Interface (API) and a Conflict Resolution Tool (UI) for the client. The application enabled client to view conflict pole data and provided options to split or merge poles based on user input. The API allowed the client to consolidate pole data from various applications into a single central database, identifying conflicts or suspected poles based on the aggregated data.

Technology Stack

Cosmos DB, .NET Core Web API, Entity framework, REST, Clean architecture, xUnit, Serilog, Angular, TypeScript, Node.js, Postman

Responsibilities

- Collaborated with software development teams to resolve defects, clarify requirements, and address design inconsistencies, conducting root cause analysis for defects
- Developed multiple API endpoints to meet project requirements
- Gained extensive experience in unit and integration testing, API endpoint testing, and end-to-end UI testing
- Prepared test cases and performed unit testing
- Wrote logic to maintain database consistency during operations



- Identified and fixed various bugs within the application
- Integrated backend APIs with the UI and ensured form validation to prevent incorrect data input
- Managed support issues, including critical batch failures, and resolved them promptly
- Coordinated with the team to maintain a stable production environment
- Created a comprehensive user manual for the conflict resolution tool, providing clear instructions and guidelines for end users on how to effectively utilize the application features

Project name

Resiliency Application

Client

A resilient grid and energy services company.

Duration

May 2023 – September 2023

Description

Project involved developing a user interface (UI) application tool for an existing client project, utilized by both the client and end users. The application allowed users to view pole data on a map interface and perform various operations according to their needs, such as searching for, identifying, and filtering updated or defective poles. Additionally, the application enabled users to view the exact pole locations using Google Street View maps.

Technology Stack

Vue.js, JavaScript, TypeScript, Node.js, CSS3, Google Maps API, Express, Cosmos DB, GeoJSON, ESRI, ArcGIS

Responsibilities

- Developed:
 - Multiple UI functionalities to meet project requirements
 - An additional endpoint to support streaming GeoJSON or CSV file data and programmatically create ESRI map layers
- Performed end-to-end testing to ensure UI functionality worked as expected
- Created an endpoint to fetch data from Excel files and inserted it into Cosmos DB after performing necessary operations
- Worked with the Google Maps API to successfully display exact street view locations and pinpoint them on the map
- Gained extensive experience with ESRI and ArcGIS platforms, utilizing GeoJSON data to view, create map layers, and perform operations, including drawing on the map
- Identified and fixed various bugs within the application
- Managed support issues, including critical failures, and resolved them promptly

