Employee Name	Mohit
Level / Role	Sr. Software Engineer
Core Competency	NodeJS, ExpressJS, MongoDB, ReactJS, WebServices, AWS
Education	B.Tech. in Computer Science
Yrs. of Development Experience	13+

Professional Summary

- Cumulative experience of 13 years in Application development, Web applications using **NodeJS**, ReactJS, and web technologies.
- Designing and developing REST API and following MVC architecture.
- Implementing various standard design patterns, like factory method, singleton, Adapter, Bridge pattern, observer pattern, which make application code more scalable and easy to understand.
- Application developed with **MERN** (MongoDB, **ExpressJS**, ReactJs, NodeJs) stack, **WebSocket** and TCP Sockets communication.
- Worked with frontend technologies like **ReactJS**, **NextJS** framework along with Typescript.
- Experienced in working with Redux architecture, using complex Object-Oriented concepts in improving the performance of the websites.
- Experience in using React JS components, Forms, Router, plus **Redux**.
- Good knowledge of React Testing library and Jest, for testing react components and their functionality.
- Designed mobile applications using **ReactNative** framework, with material ui library
- Worked with frontend technologies like **ReactJS**, NextJS framework along with **Typescript**.
- Experienced in working with Redux architecture.
- Experience in working with various css frameworks, like **Material** UI, **Tailwind** Css, **Bootstrap**.
- Developed a custom framework using ExpressJS and Mongoose for quick and rapid development of backend systems.
- Having knowledge of Infrastructure setup with **AWS** cloud setup, VPC setup and deployment system.
- Working with database technology such as NoSQL (MongoDB) and Key-Value Database (Redis), MySql, and Firebase.
- Having knowledge of various kinds of notification systems like Mail, SMS, Push notification (FCM/ APNS).

Skill Matrix / Proficiency Level

Beginner 6-12 months	Competent 1-3 years	Advanced 3-5 years	Expert 5+ years

Primary Skill(s) Expert	Proficiency
NodeJS, ExpressJS	Expert
ReactJS, Angular	Expert
Javascript / Typescript	Expert
NoSQL (Mongodb, Redis)	Expert
Web Services, MVC	Expert
Git, IDEs	Expert
Secondary Skill(s) Advanced/Competent/Beginner	Proficiency

AWS Cloud	Advanced
Micro Service Architecture	Advanced
3rd Party integration, (Mail, SMS, Push notifications, Google Maps)	Advanced
Soft Skills Communication, Leadership, Problem Solving etc	**Proficiency**
Problem-Solving	Expert
Communication	Expert

Professional Experience

Platform Name	Real-Time LLM-Powered Chat Service with User Context
Platform Description	Developed a real-time conversational AI system integrated with a mobile application, leveraging LangChain and Gemini LLM to deliver low-latency, human-like interactions. The backend was architected using FastAPI and WebSockets for persistent, bidirectional communication with the frontend. To personalize responses and maintain contextual accuracy, we implemented LangChain Structured Tools that enabled the LLM to access and process dynamic user data such as profiles, goals, transactions, and account metadata. The system was designed with a strong focus on scalability, modularity, and real-time responsiveness, aligning with modern service-oriented architecture principles and machine learning engineering best practices.
Industry	Budgeting and Finance
Role	Sr. AI Engineer
Responsibilities	Backend Architecture & Real-Time Communication: ● Designed and implemented a production-grade FastAPI backend supporting ● WebSocket-based real-time messaging, achieving sub-100ms latency for ● bidirectional chat communication. ● Structured the application using LangChain's Agent framework to orchestrate ● dynamic and context-sensitive LLM queries. ● LLM Integration & Memory Management: ● Integrated the Gemini LLM API into LangChain and configured ● ConversationBufferMemory to maintain ongoing dialogue context across sessions. ● Developed LangChain Structured Tools for efficient and secure access to:

- User Profiles (e.g., name, preferences, risk level)

- Financial Goals (e.g., saving targets, timelines)

- Transactions (e.g., categorized expenses)

- Account Metadata (e.g., last login, account type, balance)

● Orchestration & Tool Routing:

- Built a modular tool-routing system that allowed Gemini to:

- Respond directly to simple queries,

- Dynamically call structured tools for user-specific data,

- Or execute multi-step reasoning across multiple tools in sequence.

- Enabled prompt templating and dynamic routing logic using LangChain's

- AgentExecutor and toolkits.

● Data Layer & Persistence:

- Integrated MongoDB to store:

- User session histories

- Tool invocation logs

- Chat metadata including timestamps, response types, and feedback loops

Key Technologies /Tools	LangChain, Gemini, Lang Fuse, LangGraph, Mongodb, Postgress, Python
Duration	1 Year

Platform Name	AI-Based Industry Classification System
Platform Description	This project aimed to automate the classification of businesses into standard industry classification codes such as NAICS (North American Industry Classification System), SIC (Standard Industrial Classification), and ISIC (International Standard Industrial Classification) using AI and NLP-driven predictive modeling. The system leveraged Natural Language Processing (NLP) and machine learning models to analyze company names, descriptions, and business activities to assign accurate industry codes. It also featured a real-time API for classification, enabling integration with regulatory platforms, compliance systems, and business intelligence tools. Additionally, the feedback loop mechanism continuously improved classification accuracy over time.
Industry	Industry classification AI platform

Role	AI Engineer
Responsibilities	**1. AI Model Development for Industry Classification** ● Developed custom NLP models using Claude Sonnet 3.5 v2 to analyze company names, ● descriptions, and keywords to predict the most relevant industry classification code. ● Trained the model using large-scale datasets containing company registration details, historical industry classifications, and regulatory records. ● Implemented transfer learning with pre-trained language models for improved contextual understanding and classification accuracy. **2. Feature Engineering & Data Preprocessing** ● Performed text cleaning, tokenization, and stopword removal to improve data quality. ● Extracted business activity keywords using TF-IDF (Term Frequency-Inverse Document ● Frequency), word embeddings, and Named Entity Recognition (NER) to enhance model predictions. ● Applied one-hot encoding and vectorization techniques for efficient industry classification mapping. **3. Real-Time API for Classification & Integration** ● Designed and implemented a RESTful API that allows external systems to submit company details and receive predicted industry classification codes in real time. ● Ensured high availability and low latency using AWS Lambda and DynamoDB, supporting thousands of classification requests per second. ● Implemented asynchronous processing using AWS SQS for handling bulk classification requests efficiently. **4. AI-Driven Confidence Scoring & Multi-Model Classification** ● Developed a confidence-scoring mechanism that ranks multiple potential classification codes for each company. Incorporated a multi-model classification approach, where the ● system: First runs a keyword-based industry classification (rule-based). ● Then applies a machine learning-based classification (AI-driven).

	● If discrepancies arise, it flags results for manual validation or re-training.
	5. Feedback Loop for Continuous Model Improvement
	● Built a self-learning mechanism where user corrections & feedback improve model predictions over time.
	● Designed a human-in-the-loop validation system for low-confidence classifications, allowing experts to refine model outputs.
	● Deployed A/B testing models to compare different AI algorithms and optimize performance.
	6. Model Deployment & Cloud Infrastructure Optimization
	● Deployed AI models on Claude Sonnet 3.5 v2, leveraging auto-scaling for optimized performance.
	● Used DynamoDB for low-latency storage of classification history, allowing fast lookups and retraining cycles.
	● Integrated CI/CD pipelines with GitHub Actions & AWS CodePipeline for automated model updates and deployments.
	● Implemented logging & monitoring using AWS CloudWatch, ensuring real-time tracking of API requests and AI performance.
Key Technologies /Tools	Python, OpenAI APIs, Anthropic, AWS SQS, Lambda, Postgress, Stepfunctions
Duration	0.7 Year

Platform Name	Photo Sharing App - Image Detection
Platform Description	This project leverages advanced facial recognition technology to enable users to search, share, and download photos with ease. The mobile application, built using React Native for both iOS and Android, provides a seamless user experience, while the admin panel, developed in React, facilitates efficient management of users, photos, and system settings. The backend is structured using a Node.js monolithic architecture, integrating AWS Facial Recognition services for accurate image processing and DocumentDB for secure and scalable data storage. This robust architecture ensures high performance, security, and scalability, making it an ideal solution for both personal and enterprise use cases.
Industry	Education & E-Learning
Role	Tech Lead
Responsibilities	● Designed and developed RESTful APIs using Node.js monolithic architecture for user management, photo processing, and sharing. Deployed using AWS lambda. ● Implemented AWS Facial Recognition services for accurate image analysis and search functionality. ● Utilized AWS DocumentDB to store and manage structured photo metadata and user data securely.

	● Developed a JWT-based authentication system ensuring secure role-based access control. ● Built the admin panel using Next.js, integrating RESTful APIs for efficient data fetching. ● Used Redux Toolkit for efficient state management and tailwind CSS for a responsive and modern UI. ● Developed a cross-platform React Native application for iOS and Android, leveraging React Native Paper for a consistent UI/UX. ● Integrated WebSockets for instant notifications and real-time updates ● Deployed the solution on AWS, utilizing EC2, S3, and other AWS services for scalability and high availability.
Key Technologies /Tools	NodeJS, ExpressJS, AWS, AWS Lambda, NextJS, ReactNative
Duration	1.2 Year

Platform Name	**Connected Vehicle Solution**
Platform Description	This Project involves providing an integral solution for GPS based devices, which fits into vehicles to track their location and vehicle diagnostics data, which would eventually serve to customers through mobile application and web solution. involves various communication protocols between devices to server and server to client.
Industry	IOT Platform
Role	Sr. software developer
Responsibilities	Working with IOT device-server communication protocol and cloud platform which supports bulk connections and Designing APIs to support mobile clients and web portals. Responsibility of Architect and development of technical solution and application modules. Handling integration for POCs. Done various POCs for integration with other servers. Developing algorithms for finding route-deviation, calculating machine working hours etc. Leading and supervising junior devs for developing fleet web applications. Developed using React.js with Typescript & used redux for state management.
Key Technologies /Tools	NodeJS, ReactJS, MongoDB, Redis, S3, Git
Duration	4 Years
Country	USA

Platform Name	**Parking Solution**
Platform Description	This solution involves providing a seamless and effortless, parking solution to individual customers and at enterprise level. which involves Parking management for owners though web app and Parking finder with Payment for customer who seeks parking.
Industry	WebServices
Role	Sr. software developer
Responsibilities	Developed a Hybrid mobile application in ReactNative, with ReactJS, Redu. Developing custom UI library components. Working on integrating REST apis. Integrated native mobile camera for QR code scanner. Authentication using email based and google auth. Developer RBAC mechanism for Enterprise level and individual level customers. Developed an POC in Expo in reactjs, for providing a web ui for enterprise level customers.
Key Technologies /Tools	ReactNative, ReactJS, Expo, Google Analytics, Git

Duration	1 Years
Country	New Zealand

Platform Name	**Truck Driving Application**
Platform Description	This project aims to provide an integrated solution to track truck drivers via the vehicle's location tracking device as well as monitoring their driving behaviour using tracker's trips data. As well it manages the driver duties and their monthly assessments.
Industry	IOT Solution
Role	Sr. Software Developer
Responsibilities	Designing and developing cloud architecture supports multi-device vendor architecture. Integrated with multiple sensor device providers servers. Involved in Admin portal development, and writing REST API. Cronjobs writing
Key Technologies /Tools	NodeJS, MongoDB, Rabbit MQ, AngularJS, Git, AWS
Duration	1.5 Years
Country	USA