

Saksham Gupta

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Academic Background

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| • Bachelor of Technology, Computer Science and Engineering [Reg.No:22BSA10165] VIT Bhopal University | CGPA - 8.58 2022 - 2026 |
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Skills

- Programming languages: Python, Java, JavaScript, SQL.
- Frontend: ReactJS, NextJS, TailwindCSS.
- Backend: NodeJS, ExpressJS.
- Database: MySQL, Oracle DB.
- Dev Tools: AWS cloud, Oracle cloud, Git, Rest APIs, Postman, Linux.

Projects

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| Agentic AI Coding Assistant Link | [python lib: genai, sys, os, virtualenv] |
| • Leverages sys for user prompt intake and implements Python file I/O operations (read, write) through Gemini function declarations, enabling autonomous code manipulation across multiple file formats within working directory context. | |
| • Executes 20-iteration loop with sequential function calling where Gemini analyzes runtime errors, autonomously rewrites faulty Python files, and re-executes code until successful completion, maintaining full conversation state via message history array. | |
| CloudBill Processor Link | [python lib: boto3, os, json, datetime] |
| • Build an event-driven, serverless data processing pipeline on AWS using Python and AWS Lambda function and triggered by file uploads to S3 Bucket. | |
| • Engineered the core logic to automatically extract bill data from images using AWS Textract OCR, store the structured results in AWS DynamoDB, and send summary notifications via AWS SES. | |
| Secure Authentication System Link | [npm: express, aes, bcrypt, session, passport, dotenv, mysql] |
| • This Express.js application implements dual authentication via Passport.js: local strategy (email/password) and OAuth 2.0 Google strategy. Passwords undergo bcrypt hashing (14 salt rounds) then AES encryption before MySQL storage, creating layered cryptographic defense in depth. | |
| • The application uses Express sessions to keep users logged in for 6 hours, with Passport managing user state across requests. MySQL stores user data securely using parameterized queries to prevent SQL injection attacks, with sensitive credentials managed through environment variables. | |

IT Certification

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| • AWS Certified Cloud Practitioner | Verification |
| • Oracle Generative AI Professional | Verification |
| • Oracle Vector AI Search Professional | Verification |
| • Oracle OCI - Foundations Associate | Verification |
| • Oracle OCI - AI Foundations Associate | Verification |

Achievements

- Identified an error in the official AWS documentation; the suggested correction was validated and further pushed to production.
- Awarded The CBSE Certificate of Merit in Mathematics for ranking among top 0.1 Of Students Nationwide in Class 10 Board Examination.