

# Saksham Gupta

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## Academic Background

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| • Bachelor of Technology, Computer Science and Engineering<br>VIT Bhopal University | CGPA-8.58<br>2022-2026 |
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## Technical Skillset

- Programming language: 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.

## Project Experience

### Agentic AI Coding Assistant | [Link](#)

[pip/uv: 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 files within the working directory context.
- Executes iteration loop with sequential function calling where gemini analyzes and debugs runtime errors, autonomously rewrites broken python files, and re-executes code until successful completion, maintaining full conversation state via message history array.

### Serverless Receipt OCR and Storage Solution | [Link](#)

[pip/uv: boto3, os, json, datetime]

- This AWS Lambda function automatically processes receipt images uploaded to an S3 bucket using AWS Textract AnalyzeExpense API. It extracts structured data like vendor names, dates, totals, and line items, converting physical receipts into organized digital records without any manual data entry.
- Extracted receipt data is stored in DynamoDB with unique IDs for tracking and retrieval purpose. Amazon SES sends automated email summaries with purchase details, using error-resilient design that prioritizes data storage even if email notifications fail.

### Secure Authentication System | [Link](#)

[npm/pnpm: express, crypto, bcrypt, session, passport, dotenv, mysql]

- This Express application implements dual authentication via Passport: local strategy (email/password) and Google OAuth 2.0 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.

## Global Certification

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|--|--------------|
| • AWS Certified Cloud Practitioner           | Verification |
| • Oracle Generative AI Professional          | Verification |
| • Oracle Vector AI Search Professional       | Verification |
| • Oracle OCI 2025 - Foundations Associate    | Verification |
| • Oracle OCI 2025 - AI Foundations Associate | Verification |

## Accomplishments

- 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.