

# Saksham Gupta

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## Academic Background

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

## Skills

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- 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

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- 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.