

Amish Gupta

✉ : amishgupta@outlook.com

🐙 : [Github](#)

☎ : [+918734988712](tel:+918734988712)

👉 : [Leetcode](#)

in : [Linkedin](#)

🔥 : [Stackoverflow](#)

EDUCATION:

(Dual degree) B.E. Electronics & Comm. +
Integrated M.Sc. Physics +
Minor in Robotics & Automation

BITS Pilani, Hyderabad Campus (2019-2024)

- **Relevant Coursework:** DSA, ML, Operating Systems, Object Oriented Programming, C Programming, Applied Stochastic Processes, Probability & Statistics, Computational Physics, Linear Algebra & Artificial Intelligence for Robotics
- **8.5 CGPA:** Graduated with 25 extra credits beyond degree requirement (~1+ additional semester of coursework)

PROJECTS:

Chartchats (Founding Engineer) (Mar 2025 – Aug 2025)

- Made the entire backend for a financial **ai agent** that can plot indicators, create chart patterns, screen stocks, and give analysis, all through an NLP query. Used **Python**, **FastAPI**, **LangGraph**, **Redis**, **MongoDb**.
 - Made [agentami](#) framework and open-sourced it along the way.
 - Achieved safe, zero-downtime scaling from 10 to 800 users within a few days.

Solving Traveling-Salesman

- [Used](#) genetic algorithm to optimise the solution for traveling salesman problem. Integrated cellular automaton to enhance results.
 - Achieved 60%+ path optimisation over 50 generations.

AmexGPT

- Growth-hackathon: Led, architected & built the backend for an end-to-end RAG application in 2 days.
- Integrated various micro-services like web-search, file reading, vector DB search for scalable AI-driven retrieval.

Edge-Detection Algorithm

- [Implemented](#) a program to determine the edges of an image using different kernels without much aid from pre-built libraries.

Tweeting Mechanoid

- [Made](#) a twitter bot account that uses open sourced generative AI models to post tweets on it's own.

Youtube Inshorts

- Made a script that auto generates summarised news & and an AI voice reads it.
 - Garnered approximately 149,000 lifetime views.

Biped Gait Generation & Lane Change

Manoeuvre (study oriented projects)

- Learned the dynamics/physics of walking, implemented environment & agent for an 2-Dimensional biped. An informal study-oriented project.
- Read research papers on development of machine learning algorithms to determine lane changes in autonomous vehicles. An informal study-oriented project.

Red Whale App & Awalk

- Developed the User Interfaces for mobile applications using flutter. The app selects and gives a random productive tasks from the database to users. Awalk is an app to find a partner for a hobby/activity that a person wishes to do.

Skills:

Python, Data Structures & Algorithms, **FastAPI**, **Backend Development**, Machine Learning, **Golang**, **Kubernetes**, **Redis**, **MongoDb**, PostgreSQL, C, **PowerBI**, **PySpark**, ML Libraries (Pandas, NumPy, Sci-kit, Keras), Data Science, **Langgraph**, **Langchain**, **WiX**, **Dart**, **MATLAB**, **Javascript**, **Java**, **Frontend**, **Artificial Intelligence**, **Git**, **Docker**, **Site reliability**, **Communication Skills**, **Flutter**, **Teamwork**, **Problem Solving**, **Agile**

WORK EXPERIENCE:

Sr. Associate, Digital Product Management

American Express

(June 2026 - Present)

Engineer III

American Express

(Aug 2024 – June 2026)

- Completed the end-to-end designing & **backend development** (in **Golang**) & product advocate of an enterprise application that helps with bulk management of credentials of all other services.
 - Service saves **570 hours** and **\$6.2K per 1,000 secret changes** (very conservative estimate).
- Currently working on a enterprise backend service that autonomously monitors, remediates, and alerts service owners, ensuring high availability and reliability of services.
 - Deployment is projected to cut mean time to resolution by over **90%**.
- Resolved critical workflow bottleneck by migrating **LangChain** flow to **LangGraph** with parallelisation, enabling faster, more customisable Runbook generation.

Backend SDE Intern

Piramal Finance

(Jan 2024 – June 2024)

- Led the development of a standalone service, empowering internal users to conduct independent testing on production & removing dependencies on other teams.
- Contributed to the payments team's infrastructure improvements by resolving database field issues, rectifying **Sonarqube** blockers & enhanced **API** documentation & accessibility by integrating **Swagger**

Data Engineering Intern

Reckitt Benckiser

(May 2023 – Dec 2023)

- Worked with the development of TRIQ, an internal tool for tailored data quality checks using **Azure Databricks** and **Python**.
- Additionally engineered **Python** scripts, created the data models, modified KPIs for streamlined data management in **Power BI** & created the dashboard, improving reporting capabilities of TRIQ. Collaborated on SharePoint for data sharing & accessibility for the entire DE team

Investor

Self-Employment/Business, Sabhyata Decor (July 2024 –Present)

- **Funded** the launch of a wholesale & retail business specialising in premium curtains & upholstery in exchange for a 50% equity stake
 - The business achieved **breakeven** within the first **six months**

Digital Marketing

Solo-preneurship

(Dec 2020 – Mar 2024)

- Helped Service providers by connecting them with customers by supplying convertible leads to service providers using **google ads** & **search engine optimisation**

ML Engineering Intern

JSW Steel

(June 2021 - July 2021)

- Developed prediction algorithms to predict the properties of electrical steel; performed **data-preprocessing** & implemented five different algorithms to predict properties of electrical steel in a team of 3.

Teaching Assistant

BITS Pilani, Hyderabad Campus

- (Sept 2022 - Dec 2022): Took **python** classes, taught them the basics of the language, and prepared assignments.
- (Feb 2022 - May 2022): [Built animations](#) for physics experiments of a lab course as the students had an online semester.
- (March 2021 - April 2021): Assisted a physics professor, took [tutorial](#) classes for first-year students in physics, cleared their doubts, and prepared reading materials for them.

Subject Matter Expert

Chegg India

(Feb 2021 - Feb 2021)

Solved advanced physics questions asked on Chegg.

Equity Trader

Self-Employment

(Sept 2016-Present)

Trading and investing in equities, focusing on swing trading and value investing; managing ~₹4M AUM.