Aditya Godse

 github.com/adimail adimail.github.io linkedin/adimail2404 adimail2404@gmail.com

EDUCATION

AISSMS Institute of Information Technology Expected graduation June 2026
Bachelor of Technology in Artificial Intelligence and Data Science *Current CGPA: 7.72/10*
- Minor Course: Instrumentation Engineering

SKILLS

Languages: Python, Javascript, Typescript,Bash, Perl, Go

Tools: GitHub Actions, CI/CD pipelines, Prompt Engineering, Docker, scikit-learn, TensorFlow, PyTorch, Next.JS

EXPERIENCE

Webmaster, IOIT ACM Student Chapter | *Management, SEO, DevOps* Sept. 2024 - Present
- Designed and developed the **IOIT TENET** website, reaching 15,000 users within just 3 weeks.
- Increased event registration by implementing custom forms and building visually engaging 3D animations using GSAP, Three.js, and WebGL.
- Moderated a **Web3 panel discussion** at TENET'24 before an audience of 200 students.

Chief Technology Officer, Hosteze (Startup) | *AWS, System Design, GraphQL, Next.JS* Jan. 2024 - Dec 2024
- Led the design, development, testing, and maintenance of the core product, ensuring seamless functionality while maintaining comprehensive technical documentation for the entire codebase.
- Built an internal CRM tool with an ETL data pipeline that analyzes over 500 housing listings weekly to improve customer outreach.

OPEN SOURCE

OpenSSL | *C, Perl, testing, bash*
- Implemented new -cipher CLI option in OpenSSL's req command enabling users to specify private key encryption algorithms, enhancing security flexibility beyond previous default 3DES encryption. (PR: 25796)
- Updated default ciphers for for req, cms and smime apps, and updated documentation for man pages and usage examples, following OpenSSL's strict coding and documentation standards. (PR: 25839)

PROJECTS

Autonomous Rocket Landing Simulator via Reinforcement Learning | *MLOps, Mathematics, Physics*
- Developed a **Reinforcement Learning** simulation enabling an agent to autonomously learn optimal control strategies for vertical booster landing.
- Engineered a **custom physics engine** modeling thrust, gravity, rotation, air resistance, using **Verlet integration** and a UI built using typescript and websockets duplex communication.
- Designed a multi-component reward function specifically engineered to guide the agent towards a safe, fuel-efficient, upright, and centered landing.

Mermaid Mind (Web/LLM) | *Prompt engineering, Gemini, Next.js, MongoDB, NextAuth, tRPC*
- Built a web application that converts natural language inputs into Mermaid diagrams using LLMs usinf **Gemini 2.5 Pro** model.
- Created sophisticated prompt chaining techniques to handle complex diagram requirements while maintaining output validity and reducing hallucination errors and extract key entities to generate valid Mermaid syntax.

Fantasy Sports optimisation algorithm | *Linear programming, XGBoost, PuLP, MLOps, Docker*
- Engineered an **AI-driven optimization model** using XGBoost and linear programming (PuLP) to automate fantasy team selection, leveraging extensive research on player stats and game dynamics.
- Built a **multi-constraint algorithm** balancing budget, player roles, and recent form, achieving 32% higher accuracy than traditional rule-based systems.
- Led the team of 4 people for end-to-end development of **web scraping ESPN data**, preprocessing of data, Dockerising the application and deploying MLOps pipelines for scalable retraining.

OTHER ACHIEVEMENTS

- Earned the Leetcode Knight badge, ranking among the **top 5% globally**
- **Top 15%** in Kaggle CIBMTR - Equity in post-HCT Survival Predictions competition (Rank 491/3278)
- Title Holder for Asia's Largest Painting on Recycled Paper Canvas. (Link here) (Aug. 2021)
- 2-time National Level Rope Skipping Gold Medalist (Double unders & Spot jump) (2016 - 2017)