

Education

- Sri Sivasubramaniya Nadar College of Engineering, Kalavakkam  
Bachelor of Technology - Information Technology; GPA: 8.853  
Ranked 8<sup>th</sup> among 160+ students in the department  
Chennai, India  
Oct 2022 - Present
- Indian Institute Of Technology, Madras  
Diploma in Programming and Data Science; GPA: 8.58  
Chennai, India  
Jan 2023 - Present

Skills Summary

- Languages: : Python, Java, SQL, C++
- Databases: : Firebase, MySQL, Oracle SQL\* Plus, SQLite
- Web Technologies: : Flask, HTML, CSS, Bootstrap, Streamlit
- Version Control: : Git, GitHub
- Others: : Jira, Google Cloud, APIs, REST, OpenCV

Experience

- Bright Academy  
Undergraduate Research Assistant  
On-Site  
April 2024 - Present
  - Machine Learning Research and Application: Developed and trained datasets using a variety of machine learning models, encompassing both regression and classification algorithms. Performed comprehensive analyses to assess model performance through diverse evaluation metrics.
  - Project Documentation and Reporting: Composed in-depth project reports that meticulously described methodologies, data preprocessing procedures, model selection processes, and evaluation outcomes. Emphasized clarity and detail to ensure the research was easily understandable and reproducible.
  - Peer Review and Mentorship: Reviewed and offered constructive feedback on assignments and project reports submitted by peers. Helped clarify complex concepts and guided classmates toward better analytical methods.
- IEEE Computer Society  
Event Manager  
On-Site  
March 2024 - Present
  - Event Management: Successfully planned, organized, and executed various events, including workshops, seminars, and coding competitions. Coordinated with speakers, managed logistics, and oversaw event promotion to ensure high attendance and engagement.
  - Coordination Experience: Collaborated with team members to develop event schedules, prepare materials, and ensure smooth operations. Demonstrated strong organizational and leadership skills, contributing to the club's vibrant community and professional development opportunities for members.

Projects

- SSN Students Grade Analysis - IT Department: May 2024
  - Automated Grading & Analysis: Reduced teacher workload by 70% by enabling instant grade calculation through Excel sheet uploads, eliminating manual errors.
  - Interactive Visualizations: Provided comprehensive insights via 4 visualization options using Chart.js, showcasing roll number range and section-wide views.
  - User Management: Developed a secure login system for teachers and tools to manage student data and results efficiently.

Tech Stack: React.js, Firebase, Node.js, Chart.js, Vercel
- AI-Powered Test Case Generator for Image-based Functionalities (Streamlit App): Sept 2024
  - Built a Streamlit application that generates manual test cases for image-based functionalities using Google's Gemini API.
  - Implemented a system for users to upload images and provide optional context to generate highly detailed test cases.
  - Integrated multimodal AI to process both image and text inputs, providing comprehensive testing steps, preconditions, and expected results.
  - Enabled support for multiple image uploads, enhancing the testing process for a variety of use cases.

Tech Stack: Python, Streamlit, Google Gemini API, PIL
- A Two-stage Flight Delay Predictor (Machine Learning): May 2024
  - Developed a dual-stage machine learning model to forecast flight delays at 15 major U.S. airports using 2016-2017 flight and weather data.
  - Implemented a binary classifier for delay detection and a regression model for delay duration estimation.
  - Achieved 92% accuracy in classification and 94% accuracy in regression.

Tech Stack: Python, scikit, numpy, pandas, matplotlib, seaborn

Achievements

- Adobe Gensolve Hackathon 2024 - Placed among the top 5% of participants July 2024
  - Developed a tool to transform hand-drawn line art into smooth cubic Bezier curves by implementing curve regularization, symmetry detection, and completion algorithms.