SURYAPRABHA PJ

E-mail: suryaprabhapj1965@gmail.com

Linkedin: www.linkedin.com/in/suryaprabhapj

EDUCATIONAL QUALIFICATION:

Ramco Institute of Technology, Rajapalayam SEP 2023 - PRESENT

B.E in Computer Science and Engineering – 8.09 CGPA

PROJECTS:

- ✓ **Gaze-Controlled Assistive Technology** FEB 2025
  Developed an assistive technology system enabling users with limited mobility to control digital interfaces using eye gaze and integrating with AI & Computer Vision. Implemented real-time eye-tracking to detect gaze position and translate it into cursor movement. Provided an innovative solution for individuals with mobility impairments, enhancing digital accessibility.
- ✓ **Virtual Keyboard Using Hand Tracking** FEB 2025
  An AI-powered virtual keyboard controlled using hand gestures for real-time hand tracking for touchless typing. Designed a virtual keyboard layout to detect finger landmarks and identify key selections. and enabled key selection based on index finger position and thumb distance.
- ✓ **Student Profile Management System** FEB 2025
  Developed a web-based system for managing student academic records and profiles efficiently. Using React JS, Node JS, MongoDB. Integrated role-based access for students, teachers, and administrators.
- ✓ **Phishing Detection** JAN 2025
  An AI-based phishing detection system to classify URLs as phishing or legitimate. Utilized NLP techniques for text analysis and feature extraction from URLs. Achieved high accuracy using a hybrid ML model and integrated it into a web application.
- ✓ **Road Safety Analysis Dashboard** NOV 2024
  Built a data visualization dashboard to analyze road accident trends. Collected and cleaned accident data from government and open-source datasets. Designed interactive visualizations to highlight accident-prone areas and causes.
- ✓ **Heart Disease Prediction** OCT 2024
  Designed a predictive model to assess heart disease risk based on medical parameters. Cleaned and analyzed patient health data to identify key risk factors. Evaluated model performance and optimized accuracy. Helped in early detection of heart.

- ✓ **Blood Bank Management System** OCT 2024
  Developed a Java based application to manage blood donor details and inventory. Implemented object-oriented programming principles to manage blood donor records. Utilized file handling to store and retrieve donor and blood stock information.
- ✓ **Sales Data Analysis** SEP 2024
  Developed an interactive Sales Dashboard in Excel to analyze business performance and sales trends. Provided insights on product sales, loyalty scores, and revenue trends, helping in strategic decision-making.
- ✓ **Student Mark Analysis Dashboard** SEP 2024
  An interactive Student Mark Analysis Dashboard of student performance across subjects and semesters. This dashboard allows users to track individual and overall scores, identify top-performing and struggling students.
- ✓ **Chatbot** AUG 2024
  A Chat interface that leverages a Large Language Model to read and interpret client data from an internal database. Translates natural language into SQL queries by harnessing the power of OpenAI's GPT-4 which enables to interact with databases by simplifying complex data retrieval processes.
- ✓ **Speech Recognition** JAN 2024
  Speech to text is a speech recognition software that enables the recognition and translation of spoken language into text.
- ✓ **Text-to-Speech Converter** JAN 2024
  Created a system that converts text input into natural-sounding speech. Used Python, Text-to-Speech (gTTS). Developed a user-friendly web interface for input and playback.

TECHNICAL SKILLS:

• **Programming Languages**: Python, R, C, Java, Java Script

• **Libraries:** Numpy, Pandas, Matplotlib, Seaborn, Scikit-learn, Tensorflow, Open CV

• **Frameworks & Tools:** Excel, Power BI, Google Colab, Jupyter Notebook, Flask, Git, Github, IntelliJ IDEA

• **Database Management:** MySQL, MongoDB

• **Web Technologies:** HTML, CSS, Node JS, React JS, Express JS

ACHIEVEMENTS

• **Best First-Year Team – Codher'24 Hackathon**

Secured Best First Year Team award in a hackathon conducted by ACM-CEG, Anna University.

• **Finalist – Analytica Hackathon**

Advanced to the final round in a data analytics hackathon. Used Pandas for data cleaning and Matplotlib to visualize business performance, customer behavior, and revenue insights.

- **Finalist – Woodpecker's Hackathon**

Reached the final round with an AI-powered chatbot project. Implemented Natural Language Processing (NLP) for automated responses and customer engagement.

- **Participant – Data Dash Hackathon**

Created a Sales Dashboard using Excel to analyze sales trends, order status, and customer loyalty. Integrated interactive visualizations for better decision-making in business intelligence.

- **Participant – Hack Tamizhagam**

Developed an AI-based Waste Sorting System using Computer Vision. Designed an Deep Learning model to classify waste types in real-time, optimizing recycling processes.

COURSES

- **AI & ML Learning Path** – offered by Infosys Springboard
- **Java Fundamentals** – offered by Infosys Springboard