AJAY E

📞 9551646220 @ surendranajay23@mail.com in https://www.linkedin.com/in/ajay-e-09839525a/

EDUCATION

➢ **BE ECE**   **Oct 2021 - Present**
Tagore Engineering College, Chennai
CGPA: **7.84/10**
SGPA: **9.10/10**
➢ **HSC**   **Jun 2020 - Mar 2021**
St. Mary's Matriculation Higher Secondary School, Chennai
Percentage Scored: **82.965%**
➢ **SSLC**   **Jun 2018 - Mar 2019**
St. Mary's Matriculation Higher Secondary School, Chennai
Percentage Scored: **77%**

GOVERNMENT PROJECT PROPOSALS

➢ **MSME PROPOSAL – 2024**

Proposed an idea for the **GREEN-CLEAN** initiative, focusing on **environmental restoration and sustainable agriculture**.

➢ **TNSCST PROPOSAL – 2024**

Proposed an innovative idea titled **'QuickTrack: Smart Ticket and Bus Monitoring System with IoT Technology for MTC Services,'** aimed at enhancing public transportation efficiency through real-time monitoring and smart ticketing solutions, submitted to TNSCST for project funding.

➢ **SMART INDIA HACKATHON - 2024**

Presented an innovative idea titled "Downscaling of Satellite-Based Air Quality Map Using AI/ML," addressing national challenges through advanced technology solutions.

OBJECTIVES

Aspiring engineer with a passion for solving problems through innovative and effective solutions. Seeking opportunities to leverage my technical skills and project experience to contribute to impactful, technology-driven initiatives while advancing my professional growth.

EXPERIENCE

LITHIUM BATTERY ANALYSIS TRAINEE   *Jul 2024 - Aug 2024*

TAFE Research & Development, Chennai

- Gained hands-on experience in advanced battery testing techniques, including performance evaluation and safety analysis. Developed proficiency in data acquisition, BMS functionality, and failure mode analysis while adhering to industry standards. Presented detailed technical reports on findings.

DATA ANALYST   *Jun 2023 - Jul 2023*

Netcraft Solutions Private Limited, Chennai

- Utilized SQL and Python to analyze extensive datasets, reliably identifying key trends that drove strategic business decisions. Partnered with the data science team to develop and optimize data models, significantly enhancing operational efficiency and accuracy. Generated comprehensive reports and compelling visualizations with Tableau and Excel, effectively conveying insights to stakeholders and senior management.

PROJECTS

1. **ENVIROGUARD: INTELLIGENT GARBAGE SEGREGATOR WITH BIN MONITORING & LEVEL INDICATOR**

ENVIROGUARD is an intelligent garbage segregation system designed to automatically classify waste into categories (e.g., plastic, metal, organic) using sensors and image processing. It features a bin monitoring and level indication system that alerts for timely disposal, promoting efficient waste management and environmental sustainability.

2. **NEXT-GEN STREET LIGHTING: INTEGRATING IOT AND INDUSTRY 4.0 FOR URBAN EFFICIENCY**

A smart street lighting system that leverages Industrial IoT and Industry 4.0 technologies to enable real-time monitoring and automated control based on traffic and environmental conditions. This system optimizes energy consumption, reduces maintenance costs, and enhances urban infrastructure efficiency.

3. **NOISE POLLUTION MONITORING SYSTEM USING IOT AND AI&ML**

A noise pollution monitoring system leveraging IoT and AIML technologies to enable real-time tracking and automated alerting based on threshold levels. The system ensures timely awareness by notifying users through a mobile app, email, and SMS, enhancing environmental management and user responsiveness.

COURSES

1. **INTRODUCTION TO IoT**

   Completed NPTEL Certification in Introduction to IoT with a score of **71%, earning Elite Certification**. Covered IoT fundamentals, architecture, protocols, and applications in smart devices and real-time data monitoring.

2. **DATA STRUCTURES AND ALGORITHMS USING C PROGRAMMING**

   Completed NPTEL Certification in Data Structures and Algorithms using C Programming with a score of **78%, earning Elite Certification**. Mastered concepts like arrays, linked lists, and sorting techniques, while enhancing problem-solving skills through hands-on projects.

POSITIONS OF RESPONSIBILITY

- **CLASS REPRESENTATIVE**

  Aug 2022 – Present

  Tagore Engineering College

- **Department Placement Coordinator**

  Mar 2023 – Present

  Tagore Engineering College

INDUSTRIAL VISIT

- **Bharat Sanchar Nigam Limited (BSNL) – Mar 2024**

  Undergone One Day Industrial Visit Programme at BSNL Training Institute.

WORKSHOPS

- **RETECH Solutions Pvt Ltd. – Mar 2024**

  Artificial Intelligence & Machine Learning

  (AI &ML)

- **MIT, Anna University –** May 2022

  CONTROL SYSTEM AND ROBOTICS

- **POLENZA Tech Solutions – Apr 2022**

  Internet of Things **(IoT)**

---

4. **REAL TIME LED DISPLAY**

A real-time LED display system leveraging IoT technology to dynamically showcase quotes, date, time, and user-defined data. The system enables seamless remote updates via a Wi-Fi-connected app, enhancing user convenience and content flexibility.

CO-CURRICULAR ACTIVITIES

- **The Institution of Electronics and Telecommunication Engineers (IETE).**
  Presented a Paper on "Fire Detection Using Image Processing" in Jerusalem Engineering College, Chennai.

- **TRONIXTECHS'24 SYPOSIUM**
  Presented a paper Titled "Patient Health Monitoring System" event conducted by the Agni College of Technology, Chennai.

- **Hack2Tech Sustain 24 – Hour Hackathon**
  Took part in and excelled at the HACK2TECH SUSTAIN 24-Hour Hackathon, conducted by the Department of Computer Technology at the Madras Institute of Technology (MIT) Campus, Anna University.

AREA OF INTEREST

- Embedded System
- Internet of Things (IoT)
- Printed Circuit Board (PCB)
- Software Developer
- Software Analyst

SKILLS

- Programming Language: Python, Java, C.
- Version Control: GitHub
- IDE: VS code.
- Microsoft Office – PPT, Word, Excel.
- Simulation & IoT Tools: Wokwi, ThingSpeak and PowerBi
- Soft Skills: Presentation, Communication, Team Work, Leadership.

DECLARATION

I hereby declare that the information provided above is true and correct to the best of my knowledge and belief.

AJAY E