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Education

B.E - Electronics and Communication Engineering

(2022– 2026)

Karpagam Institute of Technology, Coimbatore

CGPA 7.05

Experience

New Technologies

(2023)

Advanced Techniques for Smartphone and Laptop Troubleshooting

- Diagnosed hardware issues by understanding key components (CPU, GPU, RAM, storage, battery) and using tools like multimeters and soldering kits.
- Resolved OS-related issues (Android, iOS, Windows), managed drivers, and debugged performance problems using advanced diagnostic tools.
- Implemented solutions for network issues (Wi-Fi, Bluetooth, VPN), ensured device security by detecting and removing malware, and performed data recovery using software and firmware updates.

PCB Design and Prototyping

(Aug-2023)

- Designed PCB schematics and layouts using tools like KiCAD, ensuring proper component placement and multi-layered design.
- Applied etching, drilling, and soldering techniques to create function PCB prototypes.
- Developed a PCB prototype for an IC555-based application, such as a buzzer flasher, showcasing practical circuit design skills.

Certifications

Java Programming

(2024)

Data Structure and Algorithms using Java| NPTEL

- Implemented foundational and advanced data structures (e.g., arrays, linked lists, trees, graphs) and algorithms (sorting, searching, dynamic programming) using Java, focusing on real-world problem-solving.
- Developed strong algorithmic thinking by solving programming assignments, optimizing solutions, and applying techniques like divide and conquer, greedy algorithms, and hashing to enhance computational efficiency.

Basics of Python

(2024)

Hacker Rank

- Gained a strong foundation in algorithmic thinking and logical reasoning to solve real-world problems effectively.
- Learned to write clean, efficient code using Python basics, including data types, loops, functions, and conditional statements to develop solutions.

Projects

AI-BASED-DRONES | Software and Hardware

(2023)

- Developed a real-time human detection system using the YOLOv3 deep learning algorithm, ensuring high accuracy and speed for identifying humans in disaster zones.
- Implemented real-time image processing for rapid detection, enabling quick decision-making during search and rescue operations.
- Designed the backend system to process drone-captured video feeds efficiently and integrated YOLOv3 to analyse frames for human detection.
- Enhanced autonomous drone operation by building a robust software solution that facilitates real-time analysis, improving coverage of large and cluttered areas.

Yeragam-Organics | Mini Project

(2024)

- Developed a responsive, user-friendly website with a natural green and white theme to align with the organic branding of Yeragam Organics.
- Implemented a dynamic order form that includes real-time price calculation on the front end based on product selection and quantity, ensuring an interactive user experience.
- Integrated Google Sheets to collect and store customer order details seamlessly, allowing real-time data storage without additional backend infrastructure.
- Enhanced usability with features such as a price verification checkbox, confirmation popups, and intuitive product-specific quantity input fields for smooth order placement.

Rock-Paper-Scissor | Mini Project

- User Interaction: The game allows users to select one of the three options—Rock, Paper, or Scissors—through an interactive UI, with corresponding images displayed for each choice.
- Dynamic Gameplay: A random choice generator simulates the computer's move, and the game logic determines the result (win, lose, or tie) based on the standard rules of Rock, Paper, Scissors.
- Feedback and Alerts: Results are displayed using alert messages to inform the user if they won, lost, or tied. After each round, users are prompted with an option to play again.
- Reusable and Responsive: Built using HTML, JavaScript, and minimal CSS, the game ensures smooth and dynamic gameplay while remaining simple and responsive across devices.

Technical Skills

- Programming | Python, Java
- Frontend | Html, Java script

Soft Skills

Adaptability
Team Work

Achievement

- Be10X: AI-Tools Workshop (2024)
- Oracle University: Oracle Cloud Infrastructure (2023)
- AWS: AWS Academy Cloud Foundations (2024)

