Udayan Kashyap

Education

Tezpur University Tezpur, India

Bachelors of Technology in Computer Science and Engineering

2021-Present

Central Academy Kota, India

All India Senior Secondary Certificate Examination

2019-2021

Projects

HT12D Emulator — Arduino

- Emulate a HT12D decoder using Arduino Framework.
- Data is sent using a HT12E encoder IC or using a similar emulator.
- Data is processed using an ESP8266 microcontroller
- Achieved 1% error rate with overclocked IC at 65kHz

ESP8266 Wifi Manager — Arduino, PlatformIO, WebSockets

- Created an automatic Wi-Fi management for ESP32 and ESP8266 microprocessors
- Can automatically connect to strongest Wi-Fi network and display other networks
- Starts a Web Server to make wifi reconguration possible.

Rotary Encoder — Arduino

- Implemented an algorithm to eliminate false inputs from rotary encoder.
- Used State Transition Tables to correctly identify the valid inputs.

Tournament Manager — ReactJS, PostgreSQL

- An Inter-hostel Tournament Management System
- Manage and display tournaments brackets of a college/university
- Randomly generate matches using single elimination
- User Authentication using JWT web tokens

iDustbin — ESP32, Firebase

- Intelligent waste management using IOT
- Uses ultrasonic sensors to manage dustbin diagnostics
- Uploads data to firebase cloud database

Technical Skills

Languages: C/C++, Python, Matlab, Java, SQL, HTML, CSS, JavaScript, Assembly (8085).

Technologies/Frameworks: Linux, IOT, Arduino, PlatformIO, ReactJS, PostgreSQL, Blender, OpenGL, Git, Bash, NumPy.

Involvement

Google Developer Student Clubs

August 2023 - Present

AI/ML Core Team Member

Tezpur University, India * Organized coding workshops and hackathons within the club, fostering a collaborative learning environment for fellow

* Hosted github seminar for new entrants to the club.

Tezpur University Computing Society

2022 - Present

Technical Team Coordinator

- * Organised seminars and webinars on technologies such as Web3, Blockchain.
- * Conducted YuvaManthan Hackathon in collaboration with NSS

Tezpur University, India