GOPIKRISHNA K

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In:gopikrishna-k-442bb6251

➢ CAREER OBJECTIVE

As a third-year B-Tech Electrical and Computer Engineering student, I have a strong foundation in Data Structures, Algorithms, Database Management, and Computer Networks, along with proficiency in Python (including OOP) and microcontrollers. My skills include problem-solving, teamwork, and communication, with a focus on real-time embedded systems. I am eager to apply my technical and interpersonal skills in a role where I can contribute to innovative embedded solutions and grow within the organization.

➢ EDUCATION

- **BTech** | Electrical and Computer Engineering | **Amrita School of Engineering, Coimbatore**
  2022 – 2026

- NCERT (11-12)| **GOVT HIGHER SECONDARY SCHOOL PULAMANTHOLE, MALAPPURAM Percentage: 85%**
  2020 - 2022

- SCERT(10)| **P.T.M.Y.H.S.S. EDAPPALM, VILAYUR, PALAKKAD Percentage: 96%**
  2020

➢ TECHNICAL SKILLS

- **Languages:** python(oops concept),MATLAB
- **OS:** Windows 10/11 , Linux
  Tools: AutoCAD, MPLAB X IDE, RhydoBootloader , Generative AI tools, MySQL, Aurdino, kelli uvision,
- **Office ware:** MS excel, MS PowerPoint and MS word , Microsoft copilot

➢ TECHNICAL INTERESTS

- Data Structure and Algorithm
- Database Management System
- Computer Networks
- Generative AI

- Soft Computing
- Real time systems
- Microcontrollers

➢ LICENSES & CERTIFICATIONS

- **Career Essentials in Generative AI by Microsoft and Linkedln**

  Objective: Discover the skills needed to apply generative AI in your career. Learn the core concepts of artificial intelligence and generative AI functionality. Core concepts of artificial intelligence and generative AI functionality.

  - **Skills :** Generative AI tools , Productivity Improvement , Search EngineTechnology Microsoft copilot , Microsoft 365 ,Responsible AI , Artificial Intelligence for . Business Artificial Intelligence (AI) , Computer Ethics , Generative AI

- **Career Essentials in DATA Analysis by Microsoft and Linkedln**

  Objective: Discover the skills needed for a career in DATA Analysis. Learn foundational concepts used in data analysis and practice using software tools for data analytics and data visualization

  - **Skills :** Tech Career skills , Data Analytics , SQL

➢ PROJECTS

- **Seismology Centre.**

  Objective: To create a system to store and retrieve seismograph details.

  Tools: Python

  Role: Program a database using suitable data structures to efficiently retrieve and store data.

  Outcome: Program works with quick retrieval of data. (Grade A)

- **SCADA system for refrigerator monitoring.**

  Objective: To implement SCADA system for monitoring temperature and humidity in a refrigerator with the goal of preserving food.

  Tools: Thonny, Raspberry Pi Model 4, Python

  Role: Developed and simulated a hardware and software model that displays and store data and send signal back to buzzer.

  Outcome: SCADA system was found to work with 97% accuracy. (Grade A+)

- **Obstacle Avoiding Robot Using - PIC16F877A Microcontroller**
  Objective: This project aims to develop an obstacle-avoiding robot using the PIC16F877A microcontroller, enabling autonomous navigation through obstacle detection and avoidance. It demonstrates microcontroller-based automation with potential uses in automated delivery, autonomous

exploration, and mobile robotics. The system showcases real-world robotics applications in self-navigation and collision avoidance.

Tools: MPLAB IDE for programming the PIC microcontroller, Proteus simulation software for circuit testing and verification,Microcontroller-PIC16F877A Sensors: Ultrasonic sensor for front obstacle detection and two Infrared (IR) sensors for side obstacle detection, Motor Driver Module: L293D to control DC motors based on sensor input, Motors**:** Two 5V DC motors for robot movement

Role: The project used a PIC16F877A microcontroller to process sensor data and control motors for obstacle avoidance. An ultrasonic sensor detected obstacles ahead, while side IR sensors guided directional decisions. The L293D motor driver handled motor direction, and Proteus software was used for virtual circuit testing before implementation.

Outcome: The project demonstrates an obstacle-avoiding robot that uses sensor data to navigate autonomously, showcasing microcontroller-based automation with potential for more advanced autonomous systems.

➢ ACHIEVEMENTS AND AWARDS

- **FULL A+ Holder 2020**
  10th Standerd
  P.T.M.Y.H.S.S Edappalam
  Vilayur, Palakkad
- **RAJAPURASKAR AWARD WINNER 2020**
  Bharath Scout and Guide
  PTMYHSS Edappalm
- **2st Runner up** – Mridangam Gokulastami **2023**

- **Gokulastami EXTRA CURRICULAR ACTIVITIES**
- Core Content and coordinating Team Member, **GEN-E 2022 – 2023** Amrita Viswa Vidyapeetham, Ettimadai, Coimbatore

➢ LANGUAGE PROFICIENCY

- **English** (Professional), **Malayalam** (Native),

➢ PERSONAL DETAILS

- Date of Birth: 25/10/2004
- Hobbies: cycling , percussionist
- Residential Address: PRASANNA VIHAR, PULAMANTHOLE, MALAPPURAM, 679323