BADHEL RICHA RAMAN

B.Tech. - Electronics and Telecommunication Engineering

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MIT | Academy of Engineering
(An Autonomous Institute Affiliated to Savitribai Phule Pune University)

BRIEF SUMMARY

I seek challenging opportunities where I can fully use my skills for the success of organization. I am adept at collaborating with multidisciplinary teams and communicating complex ideas effectively facilitating smooth project execution. As I progress in my academic journey, I am eager to leverage my skills and enthusiasm to contribute meaningfully to challenging projects.

KEY EXPERTISE

circuit design | MATLAB | Basics of programming languages such as Java, and C | Basics for software tools | Network Design

Documentation and paper writing

EDUCATION

MIT Academy of Engineering, Pune   2021 - 2025
B.Tech. - Electronics and Telecommunication Engineering | CGPA: **7.52 / 10**

cusrow wadia institute of technology, pune, Pune   2022
Diploma | Diploma - Electronics and Telecommunication Engineering | autonomous | CGPA: **8.40 / 10**

seventh days adventist higher secondary school, Nagpur   2019
10th | ICSE | Percentage: **78 / 100**

INTERNSHIPS

INDIAN RAILWAYS | Core Electrical Engineering / Manufacturing   27 Jun, 2024 - 24 Jul, 2024
INDIAN RAILWAYS
Completed 1 month internship in Indian railways at diesel locomotive shed, central railway, ghorpuri, pune.

PROJECTS

Automatic Water bottle filling system   01 Jul, 2023 - 01 May, 2024
Mentor: Ms. Savita Mam | **Team Size:** 4
Key Skills:

Arduino Programming | Sensor integration | troubleshooting | System Design and integration | Simulation

Writing research paper | Documentation and report writing

This project serves the purpose of automating the process of filling water bottles efficiently and accurately. This project contributes to improved productivity and resource management in various industries such as manufacturing, bottling plants, and beverage production. Designed and implemented an Arduino - based automatic water bottle filling system, integrating hardware components such as conveyor belt, water pump, Ir sensors, keypad, and LCD display. Used Proteus simulation software for design validation. Achieved accurate filling, spillage prevention, and user-friendly control interface. Ensured safety with emergency stop and spillage prevention mechanisms.
It addresses several needs and benefits, including, efficiency, accuracy, safety, user control, scalibility.

Welcome robot   06 Aug, 2023 - 15 Dec, 2023
Mentor: Satyajit chicholkar | **Team Size:** 6
This robot was made to greet the people. Whenever someone will pass through the robot or comes in front of the robot, it will detect and greets them. There are 8 to 10 different phrases used to greet the people, also it shakes the hand.

Automatic plant watering system   01 Dec, 2022 - 06 Apr, 2023
Mentor: Ms. Ritu jain | **Team Size:** 3
Key Skills:

electronics and circuit design | microcontroller programming | sensor integration | data analysis and algorithm

problem solving and troubleshooting

This project was designed to water the plants without any human interaction. If the moisture level is below the threshold then the system automatically waters the plant until the moisture level of the plant reaches to a certain or the given threshold value. A 5v water pump is used to water the plants and supply voltage used in this system is 230v. The advantages for the system is consistent watering, time

saving (freeing up time for manual watering),water efficiency, optimized plant health. The system is quite complex too as it requires a technical knowledge for setting up the system. Maintenance requirement is high for the system as the sensors and water pump should be checked regularly for proper functioning of the system. Malfunctioning of the system may occur due to improper maintenance of the system. It has its application in home gardening, landscaping, remote monitoring, research and education.

ACHIEVEMENTS

- Held first place in technodium'24
- Actively participated in Robo falconary held at COEP, Pune
- Volunteered for Technophilia event

ASSESSMENTS / CERTIFICATIONS

MATLAB Certification

Aggregate: 100 / 100

Key Skills: Navigation of MATLAB Desktop and Editor   Data plotting

Completion of the MATLAB Onramp course has equipped me with essential skills in MATLAB programming and data analysis. Outcome of this course is using MATLAB commands, navigating the desktop environment, and utilizing the editor efficiently.

Introduction to Packet Tracer

Key Skills: Packet Tracer Proficiency   Network design   Configuration Management

This Introduction to Packet Tracer course is designed for new users of Packet Tracer for self-study and familiarization with the tool used in many Networking Academy courses.

SEMINARS / TRAININGS / WORKSHOPS

Industry4.0 Institute Name: Savitri Bai Phule University

Key Skills: Automation knowledge   Robotics expertise   Supply chain management

It was a captivating journey into the forefront of industry 4.0 with diverse industries presenting their latest projects and products. From witnessing robotics arms in action to exploring the efficiency of barcode readers and plc design, each demonstration showcased the transformative potential of automation technology.

Introduction to STM32

Institute Name: MIT Academy of Engineering, Pune
Key Skills:

STM32 Microcontroller Knowledge   embedded c programming   Peripheral Interfacing   problem solving and debugging

led control

Over the course of 3 to 4 days, the "The introduction to STM32" seminar offered the basic knowledge for the STM32 and exploration of STM32 architecture. Hands on experience and guided tutorials, we got to improve the skills in embedded C programming for led, timers and lcd display. Practical sessions and problem solving and troubleshooting sessions provided opportunities to configure timers, and GPIOs.

CO-CURRICULAR ACTIVITIES

- Executive Member of ISA Organization
- Co-ordinated for technophilia event
- Leading in group projects and group execution activities
- Presenting in an effective way, communicating and engaging with the students and members in seminars and workshops

EXTRA CURRICULAR ACTIVITIES

- Presenting music in college cultural programs
- Actively participating in college activites
- Arts and creativity
- managing club activities

PERSONAL INTERESTS / HOBBIES

- Music
- learning foreign languages
- Art and painting
- Team building

- Leadership

Gender: Female
Marital Status: Single
Current Address: Alandi,pune, maharashtra, pune, India - 412105

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