Résumé

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110032
Github Link:
https://github.com/bhaskarsdose
Haackerank Link:
https://www.hackerrank.com/bhaskarsDoSE

Name: Bhaskar Dutt
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College: ADGITM(IPU DELHI)

Objective:

I am a tech enthusiast and a problem solver guy, I always believe that perseverance beat talent, therefore, I always try, I wanted to build or create new technologies which can help the masses or my country. As I am always interested in the defense sector my aim is to make India reliant on its own defense equipment production and always wanted to mimic the life of Dr.APJ Abdul Kalam sir.

Education:

Degree	College/School	University	Passing Year	Passing Percentage/CGPA
B.Tech in EEE	ADGITM	I.P University Delhi	2016-2020	8.5
XII	K.V.N.F.C	Kendriya vidyalaya	2004-2016	89%
X	K.V.N.F.C	Kendriya vidyalaya	2004-2014	8.8

Projects:

1. Building LoRaWAN(Wide Area Network) for IIT-D Startup

I am currently working on this projects in my internship this include building LoRa based wide area network also implementing smart typologies and data transmission algorithms like mesh, P2P, PEGASIS and LEACH.

2. Eyantra Robotics Competition

In this competition every team has given a theme like our is thirsty crow and there are over 28000 participants in it out of which only 150 were selected for the finals at iit Bombay and my team were in the finalist our project includes a bot called crow which uses atmega2560 micro controller with sensor to run on black line using the command which it get through zigbee protocol and the command were send through our computer using algorithm for the shortest path along with that its includes use of OpenCV ,OpenGL for AR purpose in the project and its a 6 month long competition.

3. Real-Time pollution monitor for air quality measurements

In this project I utilized the raspberry pi 3b+ as a local server to host a webpage as well as to connect various nodes

through mosquitto channel on the other hand I have used nodemcu to interface with sensors like bme680,sharp dust sensor and mq135 to measure the data like temperature,pressure,humidity,AQI,NO2,SO2,CO2, PM10&2.5 and send it to the server to log the data as well as for live display.

Video link:- https://youtu.be/qMB781NHcqE

Project link:- https://github.com/bhaskarsdose/Air-Monitoring-System

https://github.com/bhaskarsdose/AWS-based-Air-quality-logger-/

4. Smart energy logger and meter

I am working in building a device which measures multiple parameters like current,voltage,frequency and temperature for various purposes like energy monitoring, battery health and to make some real-time observation of what is electricity consumption for the purpose of increasing efficiency and health of the whole systems like in factories there is lot of energy wasted due to nonavailability of smart measuring devices which collects the data by the help of which we can improve a lot of things.

Project Link:- https://github.com/bhaskarsdose/SMART_ENERGY_METER

5. Real-time heart rate and temperature monitor using IoT

This project is been selected at vihaan 2.0 hackathon of dtu Delhi In this project we used thingspeak API and created an app through MIT app inventor, On which we get the live data of heart rate and temperature sensor,After this the data go into the Thingspeak API where we used simple algorithms to build the graphs/plots and our next motive is to compare this data by prebuilt dataset which can help the patient in real life.

Project Link:- https://github.com/bhaskarsdose/micro-health-monitoring-system

6. Geyser feedback circuit

In this project, we used thyristor(negative coefficient one) to sense the temperature by the help of which the feedback circuit gets its input which in turn with the help of npn transistors turn ON and OFF the relay connected with it which finally cut off and on the main supply to the heating aliment,this project is simply a basic prototype for understanding the working of various electronic components and their switching.

7. Smart Socket

This my internship project or mine first IoT based project from which I learnt PCB designing, relay control circuit, Nodemcu interfacing and connecting it to the internet or locally using Bluetooth hc-05 to give its command for turning on and off the appliances connected with the socket , Along with that I also integrated this with the **IFTTT** template to turn on and off the relay using the google voice assistant as it generates the instance which goes to the cloud which send the command to the applet.

Project Link:- https://github.com/bhaskarsdose/IOT-enabled-socket

8. Smart water monitoring and management system

This project basically work as an automatic control system for the water pumps in this we used two nodemcu which communicate with each other to turn ON and OFF the motor , one nodemcu is connected at the water tank with ultrasonic sensor which measures the water level and other with the relay to disconnect or connect the supply with the motor.

9. Mini Quadcopter

I am currently working on this project using Eachine flight controller using this we can do a certain task easily which we can define later.

Link:- https://drive.google.com/file/d/1tPTBw8y6eKShXya8BZ4sjXn9a4iqKP7c/view?usp=drivesdk

Trainings & Internships:

- Currently working at IIT Delhi incubated startup founded and handled by IIT Delhi prof. and Alumni named ***AEROGRAM PVT. LTD.*** as an Embedded Firmware Developer for networking devices.

- Worked as an Intern Embedded Firmware developer (IOT) at **Algo8 PVT. LTD.** under the name of Power8 for 6 months from January 2019 to June 2019.

- Worked as an intern at **W3Dev (a startup by IIITD student)** as an **IOT(Internet of things)** Developer during summer of my B.Tech 2nd year for 2 months from June 2018 to August 2018.

- Done training on **PLC, Scada and Autocad**.

Research Publications:

1. Currently working On building a standalone ad-hoc network using Wi-Fi mesh and LoRaWAN for maximizing efficiency of each node and whole system in terms of energy consumption, range and data transmission rate and planning to publish paper titled ***"Efficient data transmission for an Ad-Hoc network"***.

2. Written research paper on ***"Automation in factories using Internet of Things(IoT)"*** published in the IETET journal PAPER ID #A17.

Technical Skills:

- Internet Of Things(**IoT**) — "MAJOR INTEREST".

- Have relevant knowledge of **INDUSTRIAL AUTOMATION** like controllers for DG's.

- Languages knew **C++,Basic Python, C and Embedded C**.

- **PCB** Designing.

- Have good experience in EMBEDDED SYSTEM Design.

- Micro controller used - **ARDUINO, NODEMCU ESP-12e, EACHINE FC, ESP8266, ESP32, TEENSY , STM32**.

- Basic socket programming and API integration for IoT applications like for real world deployment.

- Cloud computing.

- Cloud used - **thingspeak,google firebase,aws(dynamoDB)** etc.

- Hardware Design.

- Worked on Augmented reality using openCV and openGL.

- Microprocessor used- Raspberry pi 3b/3b+, pi zero and Nvidia jetson nano.

- worked on PLC and Scada.

- Technical Writing.

- Blender objects designing.

- Sensor Network building.

- Efficient topology and network making experience.

- product development ,research and designing.

- **LoRaWAN , Wi-Fi 802.11 Standards**

Soft Skills:

1. Workaholic,always try to complete the work given ASAP.

2. Ability to accept failures as I know there are no failures only learning.

3. Good time management.

4. Team management skills.

5. leadership capability.

6. Public speaking.

7. Good communication skills.

Extra-Curricular Activities:

- Blogging. check out my blog at bhaskarsdose.wordpress.com

- Teacher for many students as I teach math to high school students and help juniors of my college in various projects.

- A prominent reader like I read daily newspaper and love to read biographies of great personalities like Dr.APJ Abdul Kalam ji, Bhagat Singh ji, Elon musk and jack ma etc.

- An avid debater on the topic of politics, history and ethics.

Co-Curricular Activities:

1. Merit Certificate holder for **E-YANTRA ROBOTICS COMPETITION IIT BOMBAY** and team leader for the only team selected for finals from our college at pan India level.

2. One of the organizer of T-HACK, official Hackathon of IEEE NIEC.

3. Membership coordinator at IEEE NIEC.

4. Ex-project coordinator at our college IEEE branch.

5. Team leader for various Hackathon conducted across different colleges like Vihaan 2.0 DTU, IIIT Delhi Hackathon and Arduino day Hackathon etc.

6. Been to SSB 4 times.

Personal Details:

Father's Name: Mr.Narayan Dutt Sharma
Mother's Name: Mrs.Sheela Sharma
Sex: Male
Date Of Birth: 16 January 1999
Nationality: Indian
Marital Status: Single

Refrence:

Akshay Sharma(colleague and team mate)
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Declaration:

I hereby confirm that all the information given above is correct and I affirm that the information given above if found faulty then I owe to face any action.

DATE:

04 - October - 2019

Bhaskar