

NAKKA CHAKRADHAR

POTENTIAL INTERN

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EDUCATION

LITTLE FLOWER HIGH SCHOOL

Primary Education (S.S.C)

2010 – 2014

Consistently scored the highest in my peer group.

CGPA – 9.7

FIITJEE SAIFABAD CAMPUS

Intermediate Education (T.S.B.I.E)

2014 – 2016

Got a fee waiver of 60% after an All India entrance test

Cumulative marks – 981/1000

IIT HYDERABAD

Under Graduation

(Bachelor of Technology)

2016 – PRESENT

Currently pursuing Bachelor of Technology, second year in Electrical Engineering.

Current CGPA – 8.8

PROJECTS

WEATHER MONITORING

DR. PRADEEP YEMULA

Arduino Platform

DEC. 2016 – JAN 2017

Made a basic weather monitoring prototype for observing weather characteristics.

Major accomplishments:

- Was suggested to our juniors to extend our idea during their term project

HOME AUTOMATION

DR. KOTARO KATAOKA

IoT Project, Arduino

AUG.2016 – SEPT.2016

Made a framework for a basic layout of home automation using Arduino, Raspberry Pi and other sensors

Key points:

- Achieve wireless monitoring of various home appliances from anywhere in the world. It was a proof of concept.

LFSR IMPLIMENTATION

Verilog programming

JAN.2017 – FEB.2017

Was introduced to Verilog coding environment and guided to implement a Linear Feedback Shift Register in Verilog environment

SMART ENERGY METER

DR. PRADEEP YEMULA

IoT Project, ESP32

AUG.2017 – DEC.2017

Made a working prototype of a smart energy meter capable of sending and receiving data to a server.

Key points:

- The same project was also presented at the Megathon jointly held by entrepreneurship clubs of IIT Hyderabad and IIIT Hyderabad. We were the runners-up in the competition.

GESTURE RECOGNITION

INTER-IIT TECH MEET 2017

ML,ESP32

NOV.2017 – DEC.2017

Made a functional gesture recognition module attached to a glove, capable of capturing any hand movement in 3-D space.

Key points:

- This module could guess 39 out of 43 gestures specified by DRDO, with probability 1
- Highest among all the IITs

VIDEO TRANSMISSION

INTER-IIT TECH MEET 2017

Raspberry Pi and Wi-Fi

NOV.2017 – DEC.2017

Made a functional model for live transmission of a video from one Raspberry Pi (Base station) to any other device. The live feed was encrypted with 128-bit RSA encryption available on Linux systems as GnuPG.

Key points:

- This module could transmit up to 100m distance with lowest amount of packet drops and a very high framerate and resolution (720p video with 45 fps and a latency of 0.3 seconds)

AD-HOC LOCALISATION

INTER-IIT TECH MEET 2017

Raspberry Pi and Wi-Fi

NOV.2017 – DEC.2017

Implemented localization of Raspberry Pis in an Ad-hoc network to locate and pinpoint any device in the network.

Key points:

- This module could transmit up to 100m distance with lowest amount of packet drops and a very high framerate and resolution (720p video with 45 fps and a latency of 0.3 seconds)
- Was the second-best module among all other IITs

PHYSIOLOGICAL MONITORING

INTER-IIT TECH MEET 2017

ESP32 and Sensors

NOV.2017 – DEC.2017

Implemented live monitoring of various health parameters which can superficially decide the health of a soldier in real-time.

Key points:

- Stood in second place for this problem statement

SKILLS AND INTERESTS

- Comfortable with Linux OS (Ubuntu and Kali)
- Can code in Arduino IDE and Micro-Python
- Passionate about GPUs and Communication
- Passionate about Machine learning

LANGUAGES

- **TELEGU**: native language
- **HINDI**: intermediary (speaking, reading, writing)
- **ENGLISH**: fluent (speaking, reading, writing)
- **JAPANESE**: beginner (speaking, listening)
- **FRENCH**: beginner (listening, speaking, writing)

PROGRAMMING LANGUAGES

- C (Basics and Intermediate)
- Python (Intermediate)
- Bash scripting
- Latex
- Octave
- Basics of JS

C.C.A

- Core member of Elektronika, the electronics club of IIT Hyderabad
- Was a part of Project Space, an IoT initiative of Dr. Kotaro
- Various pet projects on behalf of Elektronika
- Organised DTMF race and Mystery solving competitions during our college tech fest
- Took part in various IoT based workshops.