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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| |  |  |  |  | | --- | --- | --- | --- | |  | **NAKKA Chakradhar**  POTENTIAL INTERN | |  | | --- | | H-211, Boys Hostel  IIT Hyderabad, Kandi  Hyderabad – 502205  +91 9398941169  +91 8500584109  [ee16btech11022@iith.ac.in](mailto:ee16btech11022@iith.ac.in)  [chakri1804@gmail.com](mailto:chakri1804@gmail.com)  github.com/chakri1804 | |  |  |  |  | | --- | --- | --- | |  | **Education** | | |  | **LITTLE FLOWER HIGH**  **SCHOOL** | Consistently scored the highest in my peer group.  CGPA – 9.7 | |  | **Primary Education (S.S.C)** | |  | *2010 – 2014* |  |  |  |  | | --- | --- | --- | |  | **FIITJEE saifabad campus** | Got a fee waiver of 60% after an All India entrance test  Cumulative marks – 981/1000  Got selected in the KVPY programme and was eligible for KVPY scholarship | |  | **Intermediate Education**  **(T.S.B.I.E)** | |  | *2014 – 2016* | |  | **IIT HYDERABAD** | Currently pursuing Bachelor of Technology, second year in Electrical Engineering.  Current CGPA – 8.8 | |  | **Under Graduation**  **(Bachelor of Technology)** | |  | *2016 – Present* |  |  |  |  | | --- | --- | --- | |  | **PROJECTS** | | |  | **Weather monitoring**  Dr. pradeep yemula | Made a basic weather monitoring prototype for observing weather characteristics in my campus. It was made on Arduino platform using Arduino board under the guidance of Dr. Pradeep Yemula.  **Major accomplishments:**   * Was suggested to our juniors to extend our idea during their term project | |  | **Arduino Platform** | |  | *Dec. 2016 – Jan 2017* |  |  |  |  | | --- | --- | --- | |  | **Home automation**  Dr. Kotaro Kataoka | Made a framework for a basic layout of home automation using Arduino, Raspberry Pi and other sensors  **Key points:**   * The project was initiated by Dr. Kotaro to achieve wireless monitoring of various home appliances from anywhere in the world. It was a proof of concept. | |  | **IoT Project, Arduino** | |  | *Aug.2016 – Sept.2016* | |  | **LFSR implimentation** | Was introduced to Verilog coding environment and guided to implement a Linear Feedback Shift Register in Verilog environment | |  | **Verilog programming** | |  | *jan.2017 – feb.2017* |  |  |  |  | | --- | --- | --- | |  | **Smart energy meter**  Dr. Pradeep yemula | Made a working prototype of a smart energy meter capable of sending and receiving data to a server. It is capable of analysing the power consumption of an entire locality as a whole and monitor power theft in the grid.  **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. | |  | **IoT Project, ESP32** | |  | *Aug.2017 – dec.2017* |  |  |  |  | | --- | --- | --- | |  | **gesture recognition**  inter-iit tech meet 2017 | Made a functional gesture recognition module attached to a glove, capable of capturing any hand movement in 3-D space. Flex sensors and Gyro sensors were used to realize this project. To differentiate between various gestures, KNN algorithm was utilized.  **Key points:**   * This module can guess 39 out of 43 gestures specified by DRDO, with an accuracy 1 * Highest among all the IITs | |  | **ML,ESP32** | |  | *Nov.2017 – dec.2017* | |  | **VIDeo transmission**  inter-iit tech meet 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) | |  | **Raspberry Pi and Wi-Fi** | |  | *Nov.2017 – dec.2017* |  |  |  |  | | --- | --- | --- | |  | **AD-hoc localisation**  inter-iit tech meet 2017 | Implemented localization of Raspberry PIs in an Ad-hoc network to locate and pin-point any device in the network. Used N-map and python to know signal strengths from one node to any neighboring node  **Key points:**   * This module is capable of tracking nodes in a radius of 100m in closed room environment and around 200m in an outdoor environment, to an accuracy of 15cm. * Was the second-best module among all other IITs | |  | **Raspberry Pi and Wi-Fi** | |  | *Nov.2017 – dec.2017* |  |  |  |  | | --- | --- | --- | |  | **Physiological monitoring**  inter-iit tech meet 2017 | Implemented live monitoring of various health parameters which can superficially decide the health of a soldier in real-time. We calculated a total of 7 parameters.  **Key points:**   * Stood in second place for this problem statement | |  | **ESP32 and Sensors** | |  | *Nov.2017 – dec.2017* |  |  |  |  |  | | --- | --- | --- | --- | |  | **Skills and interests** |  | **Languages** | |  |  |  |  | |  | * Comfortable with Linux OS (Ubuntu and Kali) * Can code in Arduino IDE and Micro-Python * Passionate about GPUs and Communication * Passionate about Machine learning |  | * **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.C.A** | |  |  |  |  | |  | * C (Basics and Intermediate) * Python (Intermediate) * Bash scripting * Latex * Octave * Basics of JS |  | * Core member of Elektronica, the electronics club of IIT Hyderabad * Was a part of Project Space, an IoT initiative by Dr. Kotaro * Various pet projects on behalf of Elektronica * Organised DTMF race and Detective competitions during our college tech fest * Took part in various IoT based workshops. |  |  | | --- | |  | |