Priyanka Kurkure

https://priyanka-vk.github.io/

Bachelor of Technology
Final Year Undergraduate
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OBJECTIVE

A self-motivated undergraduate seeking an opportunity in a vibrant organization to improve my knowledge through research and practical experiences.

EDUCATION

Course/Examination	Board	Year	Institute/School	CGPA / %
B.Tech (Electrical Engineering)		**2015 – 2019** (present)	**Indian Institute of Technology, Ropar**	**8.24 / 10** (till 6th semester)
Intermediate (Class XII)	State Board	2014 – 2015	Shivchattrapati College, Aurangabad	90.77%
Matriculation (Class X)	State Board	2012 – 2013	S.B.O.A. Public School, Aurangabad	96.18%

RELEVANT UNDERGRADUATE COURSEWORK

Measurements and Instrumentation	Data Structures and Algorithms	Digital Signal Processing
Fundamentals of Wireless Communication	Communication Engineering	Digital Electronics
Image Processing and Pattern Recognition	Engineering Electromagnetics	Analog Electronics

INTERNSHIPS

1. **Industrial Engineering Internship**   **[May 2018-July 2018]**
    Organization : Endress+Hauser (India) Automation Instrumentation Pvt. Ltd.
    Guide   : Milind Shrikhande, Asst. General Manager, Operations and Engineering

- Worked on various assembly lines of the measuring instruments used to measure level and pressure at Endress+Hauser Automation Instrumentation Pvt. Ltd.
- Observed and analyzed various industrial management concepts implemented in the industry.
- Designed and implemented two automated systems for the industry. One was to implement an automated device locating system for inventory management and the other one included developing an automated BMI Measurement Device using the sensor FDU90 manufactured at Endress+Hauser Automation Instrumentation Pvt. Ltd.

2. **Research and Development Internship**   **[May 2017- July 2017]**
    Organization : Ekalavya Summer Internship, IIT Bombay
    Guide   : Prof. Dr. D.B. Phatak, Prof. Dr. Kannan M. Moudgalya, Sr. Project Manager Rajesh
                       Kushalkar, IIT Bombay

- Created a Generic Internet of Things (IoT) platform for developers as well as users. Basic role in the project development included programming the Wi-Fi Module and setting up the hardware required for the project. Designed the schematic for Generic Platform which included various sensors and actuators as well as for Smart Plug.
- Developed a specific application of IoT: **Smart Plug.** The basic and advanced functionalities were included in this application like switch control, intensity control, timer settings, energy monitoring etc.
- Real time plotting and storage facilities were also implemented in the dashboard.

PROJECTS

1. **Lung Cancer Detection using Convolutional Neural Networks | Team of 2**   **[Feb 2018-May 2018]**
   (Guide: Dr. Subramanyam Murala-Asst. Professor, IIT Ropar)
- Created a 2D convolutional neural network to classify the CT scans of patients into malignant or benign tumors.
- The network was trained and tested on the LIDC/IDRI database which consisted of 888 CT scans in .mhd and .raw formats.

2. **OFDM Transmitter implementation in MATLAB | Team of 3**   **[Feb 2018-March 2018]**
   (Guide: Dr. Suman Kumar-Asst. Professor, IIT Ropar)
- Studied Orthogonal Frequency Division Multiplexing scheme and the importance of various steps in each section of the transmission system.
- Implemented OFDM transmitter in MATLAB to visualize the signal transmission in OFDM system over a wireless channel by generating and adding virtual noise and other factors like ISI due to multipaths.

3. **RF based Secured Remote Controller |Team of 3**   **[Oct 2017-Nov 2017]**
   (Guide : Dr. Suman Kumar-Asst. Professor, IIT Ropar)
- Created a secured remote controller to control various household appliances from distances up to 50-60 meters.
- The control and functioning was authenticated by transmission of secured address bits with the data bits.

4. **Number Theory and Factorial Computation of large number**   **[Sept 2017-Oct 2017]**
   (Guide : Dr. Puneet Goyal-Asst. Professor, IIT Ropar)
- Studied number theory and developed an algorithm to calculate the factorial of large numbers without using recursion.
- The basic data structure used to compute the factorial of numbers as large as 1000 is linked list.

5. **Home Automation Project using Arduino |Team of 2**   **[Oct 2016- Nov 2016]**
   (Guide: Dr. Rohit Y. Sharma-Asst. Professor, IIT Ropar)
- The project aims at reducing the energy wastage by switching off the lights and fans in a room using up down counter when no person is present inside.
- The project was also presented in Digitrix- The Annual Electronics Exhibition held at IIT Ropar.

TECHNICAL SKILLS

Programming Languages : C, MATLAB, C++, Embedded C, Octave
Software Packages   : SolidWorks, NodeRed, Fritzing, PSpice, Proteus,
Micro-controller Tools   : Arduino IDE, NodeMCU programming using Arduino IDE
Operating Systems   : Windows, Linux (Ubuntu basic)

ACHIEVEMENTS

- Among the **top five students** in Electrical Engineering Department at Indian Institute of Technology, Ropar.   [2018]
- Secured All India Rank 197 (Merit) in ALL INDIA OPEN MATHEMATICS SCHOLARSHIP EXAMINATION organized by Institute of Promotion for Mathematics (IPM).   [2012]
- Awarded Distinction in AUSTRALIAN NATIONAL CHEMISTRY QUIZ organized by The Royal Australian Chemical Institute, Australia.   [2009]

EXTRA-CURRICULAR ACTIVITIES

- Active member of Organizing Committee of Advitiya Model United Nations, IIT Ropar.
- Former Member of BloodConnect Foundation, IIT Ropar. Represented the team at BloodConnect Annual Event'16 at IIT Delhi.
- Former member of Enactus, IIT Ropar team.