Priyanka Kurkure

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

Bachelor of Technology
Final Year Undergraduate
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OBJECTIVE

A self-motivated undergraduate seeking an internship 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. **Internship at Endress+Hauser (India) Automation Instrumentation Pvt. Ltd.**   **[May 2018-July 2018]**
   (Guide: Milind Shrikhande, Asst. General Manager, Operations and Engineering)
- Learnt about various assembly and automation processes of the measurement instruments manufactured at Endress+Hauser Pvt. Ltd.
- Observed and analyzed various industrial management concepts implemented in the industry.
- Implemented a project in the Quality Department for easy locating of various gauges in the standard room using advanced electronics concepts and microcontroller.
2. **Generic IoT Platform, Ekalavya Summer Internship - IIT Bombay |Team of 7|**   **[May 2017- July 2017]**
   (Guide: Prof. Dr. D.B. Phatak, Prof. Dr. Kannan M. Moudgalya, Sr. Project Manager Rajesh Kushalkar, IIT Bombay)
- The internship aimed at creating a generic Internet of Things (IoT) platform for developers as well as users. The dashboard was created and bi-directional communication was implemented between platform and hardware devices using NodeMCU (Wi-Fi Module).
- An application- **Smart Plug** was developed based on the results obtained from previous implementations. It basically controls all the devices plugged into it using a web application wirelessly.

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   : SoidWorks, NodeRed, Fritzing, PSpice, Proteus,
Micro-controller Tools   : Arduino IDE, NodeMCU programming using Arduino IDE
Operating Systems   : Windows, Linux (Ubuntu basic)

TRAINING/WORKSHOPS

1. **Androbot Training, Entrench Electronics – Ropar**   **[Oct 2015]**
- Learnt to build a robot by creating an interface between the micro-controller and Bluetooth.
- The micro-controller used was AVR Atmega8 and the interface was created using AVR Studio 4.

2. **Sparshbot Training, Entrench Electronics – Ropar**   **[Oct 2015]**
- Learnt to build a robot by creating an interface between the Microcontroller and Touch Screen.
- The input and instructions were given to robot by touch hence the name 'Sparsh (meaning *touch*) Bot'.

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.
- Member of BloodConnect Foundation, IIT Ropar. Represented the team at BloodConnect Annual Event'16 at IIT Delhi.
- Former member of Enactus, IIT Ropar team.