

# Priyanka Kurkure

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

Bachelor of Technology

Third Year Undergraduate

Electrical Engineering Department

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## OBJECTIVE

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

## EDUCATION

Course / Examination	Board	Year	Institute/School	CGPA / %
<b>B.Tech</b> (Electrical Engineering)		<b>2015-2019</b> (present)	<b>Indian Institute of Technology Ropar</b>	<b>8.05 / 10</b> (till 4 <sup>th</sup> semester)
Intermediate (Class XII)	State Board	2014-2015	Shivchhatrapati College (India)	90.77%
Matriculation (Class X)	State Board	2012-2013	S.B.O.A. Public School (India)	96.18%

## RELEVANT UNDERGRADUATE COURSEWORK

Analog Electronics	Signals and Systems	Power Systems*
Digital Electronics	Communication Engineering	Data Structures*
Introduction to Computing (C Lang)	Engineering Electromagnetics*	Digital Signal Processing*

\*Courses pursuing in the current semester, from August 2017 to December 2017.

## INTERNSHIPS AND PROJECTS

### 1. 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)

Project Link: <https://github.com/priyanka-vk/Generic-IoT-Platform>

- 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 (WiFi 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.

### 2. Home Automation Project using Arduino |Team of 2| [Oct 2016- Nov 2016]

(Guide: Dr. Rohit Y. Sharma-Asst. Professor, IIT Ropar)

Project Link: <https://github.com/priyanka-vk/home-automation>

- 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.

### 3. Number Theory and Factorial Computation of large numbers [Sept 2017-Oct 2017]

(Guide : Dr. Puneet Goyal-Asst. Professor, IIT Ropar)

Project Link: <https://github.com/priyanka-vk/factorial-computation>

- 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.

#### 4. RF based Secured Remote Controller |Team of 3|

[Oct 2017-Nov 2017]

(Guide : Dr. Suman Kumar-Asst. Professor, IIT Ropar)

Project Link: <https://github.com/priyanka-vk/RF-based-Secured-Remote-Controller>

- Created a secured remote controller to control various household appliances from distances upto 50-60 meters.
- The control and functioning was authenticated by secured address bits transmission with the data bits.

#### 5. Astable Multivibrator using Transistors

[March 2017-April 2017]

(Guide : Dr. Vinayak Hande-Asst. Professor, IIT Ropar)

Project Link: <https://github.com/priyanka-vk/Astable-Multivibrator-using-Transistors>

- Studied various properties of Bipolar Junction Transistors and implemented an astable multivibrator using transistors.

### TECHNICAL SKILLS

**Programming Languages** : C, Embedded C, MATLAB, C++

**Software Packages** : SolidWorks, NodeRed, Fritzing, KiCad, Eagle, Mosquitto, Proteus

**Micro-controller Tools** : Arduino IDE, NodeMCU programming using Arduino IDE

**Operating Systems** : Windows, Linux (Ubuntu)

### TRAINING

#### 1. Androbot training, Entrench Electronics - Ropar |Team of 2|

[ 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 |Team of 2|

[ 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 three students** in Electrical Engineering Department at Indian Institute of Technology, Ropar. [2017]
- Awarded Distinction in AUSTRALIAN NATIONAL CHEMISTRY QUIZ organized by The Royal Australian Chemical Institute, Australia. [2009]
- Secured All India Rank 197 (Merit) in ALL INDIA OPEN MATHEMATICS SCHOLARSHIP EXAMINATION organized by Institute of Promotion for Mathematics (IPM). [2012]

### EXTRA-CURRICULAR ACTIVITIES

- Active Member of Enactus, IIT Ropar Team.
- A member of BloodConnect IIT Ropar and represented the college team at **Annual Event'16 (AE)** of BloodConnect held at IIT Delhi in July 2016.
- Active Member of Organizing Committee of MUN, IIT Ropar.
- Mess Representative of Transit II mess, IIT Ropar.