

# Pranav Kumar

| Electronics, Robotics Research Enthusiast |  
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## EDUCATION

### UIET, PANJAB UNIVERSITY

B.E IN ELECTRONICS

AND COMMUNICATION

3rd Year | Chandigarh, India

CGPA: 6.96 / 10.0

### DELHI PUBLIC SCHOOL

HIGHER SECONDARY, CBSE

May 2015 | Ranchi, India

Percentage: 90.2 / 100.0

### ABR FOUNDATION

SECONDARY, CBSE

May 2013 | Sasaram, India

CGPA: 9.8 / 10.0

## SKILLS

Software / Tools:

C • Embedded C • OpenCV • ROS  
python • Matlab • RTOS • Git • Pspice  
Circuit Prototyping • Linux • Fritzing

Hardware:

Raspberry Pi • Atmel chip • Arduino • ICs  
Circuit Design • I2C • sensor interface

Familiar:

Eagle • Gcode • Mcode • Labview  
Tspice •  $\text{\LaTeX}$

## LINKS

Github:// [pranav083](#)

LinkedIn:// [pranav083](#)

Twitter:// [@pranav083](#)

## PERSONAL PROJECTS

### HARVESTER BOT

(Jan 2017 – Mar 2017)

- A prototype machine for efficient harvesting without wastage of straw generated in e-YIC (IIT Bombay)

- Proposal Document [Link](#)

### 2D PLOTTER

(June 2017 – July 2017)

- With the vision of modularity among prototyping hardwares, created 2D Plotter using Arduino Mega, RAMP 1.4 with open Source Marlin Firmware.

- Youtube [Video](#)

## INTERNSHIP / EXPERIENCE

### E-YRC (IIT BOMBAY) | TEAM LEADER & OPEN SOURCE CONTRIBUTOR

Oct 2018 – Feb 2019 | Chandigarh, India

- Using OpenCV for object Detection and ArUco Markers. Making a lighter and less complex multifunctional line Following algorithm using FSM.
- Youtube [Video](#) and Github [Code](#).

### PRODUCT DEVELOPMENT FOR NGO | STUDENT LEAD

Contact : DR. MANU SHARMA - [manu@pu.ac.in](mailto:manu@pu.ac.in)

September 2018 – Present | UIET,PU,Chandigarh, India

- This lab in college work as a bridge between college-industry partnership program. In this we have build many different project for NGO.
- Design and build several product based design for NGO which show case these in the school for encouraging secondary school.
- Managed resources and Team of around 20 team members.
- Follow up this Github Link for More Info [Codes and Document](#).

### CIC, UNIVERSITY OF DELHI | TEAM MEMBER & INTERN

June 2018 – July 2018 | Delhi, India

- Worked on swarm robotics formation control robots using ROS(robot operating system).
- Follow the [link](#) for more Information.
- Achieved work [Code](#).

### DESIGN AND INNOVATION CENTER | TEAM LEADER

Contact : DR. NAVEEN AGGARWAL - [navagg@pu.ac.in](mailto:navagg@pu.ac.in)

Initiative By MHRD(Gov.of India) on collaborative research and innovation

Jan 2018 - Oct 2018 | PU,Chandigarh, India

- To propose a 3-D printing technology with the multipurpose capabilities enabling us to multi tasking like 2D plotting, 3D printing etc.
- Enable Multiple capability with only add-on modules with same Base.

## ACHIEVEMENTS

2018 Pocket Beagle at Mouser electronics event at IIT Roorkee

2019 Poster presentation at Chandigarh Science Congress(CHESCON)

## ORGANIZATION AND EVENTS

### EMBEDDED GROUP OF UIET | COMMUNITY HEAD

June 2017 – present | Telegram Group [Link](#)

Initiative to develop an open embedded environment for all with around 340+ members.

### WORKSHOPS AND SEMINAR | STUDENT SPEAKER

June 2017 – present | [Drive Link](#)

Organized different WORKSHOP and SEMINAR on different Topic related to electronics.

### ELECTRONICS HACKATHON | ORGANIZER

June 2017, August 2018 | [Photo Gallery Link](#)

Organized electronics hackathon on North India level.