

Pranav Kumar

| Electronics, Robotics Research Enthusiast |
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EDUCATION

UIET, PANJAB UNIVERSITY

B.E IN ELECTRONICS
AND COMMUNICATION
4rd Year | Chandigarh, India
CGPA: 7.01 / 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
Embedded Linux • Fritzing

Hardware:

BeagleBone • Raspberry Pi • ARM
ICs • Circuit Design • I2C • Sensor
Interface • Circuit Prototyping

Familiar:

Eagle • Gcode • Mcode • \LaTeX

LINKS

Github:// [pranav083](#)

LinkedIn:// [pranav083](#)

Twitter:// [@pranav083](#)

ORGANIZATION AND EVENTS

EGU, UIET | COMMUNITY HEAD

June 2017 – present | [Group Link](#)

• Initiative to develop a open
embedded environment for all with
around 550+ members.

WORKSHOPS, SEMINAR AND HACKATHONS |

SPEAKER & ORGANIZER

June 2017 – present | [Gallery Link](#)

• Organized events on different Topic
related to electronics at North India
Level.

INTERNSHIP / EXPERIENCE

BEAGLEBOARD.ORG | GOOGLE SUMMER OF CODE (GSoC)-2019

OPEN SOURCE CONTRIBUTOR

June 2019 – Aug 2019

- Using BeagleBone and 74hc299 shift Register, providing a reference design for bi-directional communication using multiple peripherals.
- For more Information see Project [Page](#) and Beaglebone official blog [Page](#).
- Youtube [Playlist](#) and Github [Code](#).

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.
- Making a lighter and less complex multifunctional line Following algorithm using FSM that is easy to implement and build.
- Youtube [Video](#) and Github [Code](#).

PRODUCT DEVELOPMENT FOR NGO | STUDENT LEAD

Contact : DR. MANU SHARMA - manu@pu.ac.in

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

- Design and build several product based design for NGO by managing resources and Team of around 20 team members.
- Follow up this Github Link for More Info [Codes and Document](#).

CIC, DELHI UNIVERSITY | TEAM MEMBER & INTERN

June 2018 – July 2018 | Delhi, India

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

DESIGN AND INNOVATION CENTER | TEAM LEADER

Contact : DR. NAVEEN AGGARWAL - 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 .

PERSONAL PROJECTS

HARVESTER BOT | (JAN 2017 – MAR 2017)

• Prototype for efficient harvesting without wastage of straw in e-YIC(IIT Bombay), Proposal Document [Link](#)

2D PLOTTER(OPEN SOURCE PROJECT) | (JUNE 2017 – JULY 2017)

• Using Arduino Mega, RAMP 1.4 with Marlin Firmware, Youtube [Video](#)

ACHIEVEMENTS

- 2019 Robot Operating System Conference ROSCon, Macau Scholarship Holder
- 2019 Awardee for excellence in Technology by Kirron Kher (MP, Chandigarh)
- 2019 1st at Design and Idea Competition by IIC, Panjab University at Chandigarh
- 2019 Mentor of 1st winning team of Smart India Hackathon-2019(Hardware Edition)
- 2018 winner of Pocket Beagle at Mouser electronics event at IIT Roorkee