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 Contributer
June 2019 – Aug 2019

- Using BeagleBone and 74hc299 shift Register, providing a reference design for bi-directional commincation using multiple peripherials.
- For more Infomation see Project Page and Beaglebone official blog Page.
- Youtube Playlist and Github Code.

E-YRC (IIT BOMBAY) | Team Leader & Open Source Contributer
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 resourses 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 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 capabiltiy with only addon 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