

PRANAV Kumar

pranavkumar@tuta.io | linkedin.com/in/pranav083 | github.com/pranav083 | +91-9614436659

JOB EXPERIENCE/ INTERNSHIP

Futuristic Labs Pvt. Ltd.

Jan. 2020 – Present

Embedded Firmware Engineer

Hyderabad, IN

- Development of embedded solution form different Hardware and IOT based appliances.
- Development of bridge between RTOS Board and Compute Module.
- Working with embedded systems to have complete deployable system on device.

Google Summer Of Code(GSOC)

June 2019 – Aug. 2019

BeagleBoard.Org(Open Source Contributor)

Chandigarh, IN

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

e-YRC (IIT Bombay)

Oct. 2018 – Feb. 2019

Team Leader & Open Source Contributor

Chandigarh, IN

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

Embedded Product development for Saksham Creative Edu.(NGO)

Sept. 2018 – Dec. 2018

Student Lead

Chandigarh, IN

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

EDUCATION

UIET, Panjab University

Chandigarh, IN

B.E in Electronics and Communication Engineering

CGPA: 7.3 May 2016 – Sept. 2020

Delhi Public School

Ranchi, IN

Higher Secondary, CBSE

90.2 % May 2015

PROJECTS

Stepper_STSPIN220–library | C++, Arduino IDE, Driver, STSPIN220

Dec. 2020

- Development of the generic driver for 1/256 steps stepper driver [Link](#).

QuadCopter PX4 ROS | MavROS, ROS, Python, Git

Oct. 2019

- worked on the simulation of the px4 drones using Mavros and Mavlink in ROS and Gazebo [Link](#).

TECHNICAL SKILLS

Languages: C/C++, Python, Embedded C, OpenCV, Embedded Linux, Linux, ROS

Hardware Tools: ARM, I2C, SPI, CAN, Modbus, UART, BeagleBone, Compute Modules(Rpi CM4), Markers, ESP32

Developer Tools: Git, Docker, TravisCI, MenderIO, LvGL, MqTT

Hardware : Steppers, Circuit Desiging, Stepper Drivers(MA86xxx, DRV8825) etc.

Familiar: Algorithms, L^AT_EX, Shell, Yocto, ESP-IDF

ACHIEVEMENTS AND AWARDS

- 2019 – Robot Operating System Conference **ROSCon, Macau, China Scholarship Holder**
- 2019 – Awardee for excellence in Technology field by **Mrs. Kirron Kher (MP ,Chandigarh)**
- 2019 – **1st** at Design and Idea Competition by IIC, Panjab University at Chandigarh
- 2019 – **Mentor** of winning team at **Smart India Hackathon-2019** by **Kokuyo Camlin** at IIT Hyd.
- 2018 – Winner of Pocket Beagle at **Mouser electronics** event at **IIT Roorkee**

COMMUNITY AND EVENTS

- 2018 & 2019 Speaker at **Software Freedom Day**
- Speaker & Organizer in Embbeded Community in the Chandigarh Area, See [Gallery Link](#).