Rithvik Patibandla

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EDUCATION

INDIAN INSTITUTE OF TECHNOLOGY, KANPUR
B.Tech, Electrical Engineering
Jul 2015 - Exp. Apr 2019
Kanpur, UP, IN

SRI CHAITANYA NARAYANA JUNIOR COLLEGE
TSBIE (Class XII Equiv.)
Jun 2013 - Mar 2015
Hyderabad, TS, IN

NEW VISION HIGH SCHOOL
SSC (Class X Equiv.)
Mar 2013
Khammam, TS, IN

SKILLS

Application Development (Qt)
Electrical circuits and PCB design
Robotics
Full Stack Web Development

LANGUAGES

Python, C, C++, Qml, JavaScript

COURSEWORK

COMPUTERS
Data Structures and Algorithms (Ongoing)
Fundamentals of Computing

MATHS
Mathematics - I, II
Probability and Statistics
Partial Differential Equations
Complex Variables

WORK EXPERIENCE

GOOGLE SUMMER OF CODE
The Linux Foundation | 2017 | Mentor : Dongxu Li

- The project aims to build a Common Print Dialog to make printing across Linux distros simple, uniform and efficient.
- Built a dialog in Qt and integrated CUPS and Google Cloud Print APIs built by other students for this project.
- It is planned to push the dialog upstream to replace QPrintDialog as the standard Qt library for printing.

AUTONOMOUS UNDERWATER VEHICLE
IIT Kanpur | Dec 2015 - Present | Prof. Sachin Y. Shinde, ME, IITK

- Serving as the Lead of the Electrical Subsystem since Jan 2017
- Created Electrical Systems for the vehicle, most notable of which include a Battery Management System to monitor and protect onboard Lithium Polymer batteries, sensors and other modules.
- Stood in 2nd place at SAVe - 2017, NIOT, Chennai, TN, IN.

ABHYAST PROGRAM
Boeing and IIT Kanpur | Feb 2017 - Present | Prof. Shantanu Bhattacharya, ME, IITK

- The project aims to build an autonomous dual-vehicle system consisting of a quad copter and a ground vehicle to survey and perform tasks in an area of interest
- Working on integrating data from LiDAR and Stereo cameras to generate a 3D map of the area in interest
- Use the aforesaid map to generate a path for the ground vehicle to follow for navigation and interaction with its environment

PERSONAL PROJECTS

SINGLE BOARD COMPUTER
2017
Build a compact, low-power single board computer that primarily runs Linux and possibly run a self-made ARM based kernel

MYOS
2017
Build a kernel to run it on the single board computer I've been building. The kernel is currently made in x86 and will be ported to ARM once it reaches a strong and stable state.

SCHOLASTIC ACHIEVEMENTS

All India Rank 667 in JEE Advanced	National	2015
All India Rank 1618 in JEE Mains	National	2015
Qualified Kishore Vaigyanik Protsahan Yojana (KVPY) conducted by IISc, Bangalore	National	2014
Qualified National Talent Search Examination (NTSE) conducted by NCERT	National	2013

OTHER CAMPUS ACTIVITIES

Secretary, Robotics Club, IIT Kanpur Jul 2016 - Apr 2017