Aman Chandra

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EDUCATION

INDIAN INSTITUTE OF TECHNOLOGY, KHARAGPUR
B.Tech + M.Tech in Biotechnology
Sophomore
Expected April 2020 | Kharagpur, India
CGPA: 7.33/10.0

ST. MICHAEL'S HIGH SCHOOL
All India Senior School Certificate
Grad. April 2015| Patna, India
Percentage: 95.6%

ST. XAVIER'S HR. SEC. SCHOOL
Certificate of Merit
Grad. April 2013| Bettiah, India
CGPA: 10.0/10.0

LINKS

Github:// **amanchandra333**
LinkedIn:// **amanchandra333**

COURSEWORK

Programming & Data Structures
Partial Differential Equations
Basic Electronics
Probability and Statistics
The Arduino Platform and C Prog. (Coursera)
Control of Mobile Robots (Coursera)
Robotics: Aerial Robotics (Coursera)
C++ for C Programmers (Coursera)
Intro to Java Programming (Udacity)
Developing Android Apps (Udacity)

TECHNICAL EXPERTISE

Hardware
ATmega • Arduino • Raspberry Pi
Software
Atmel Studio •Proteus •SolidWorks •Android Studio •After Effects
Languages
C • C++ • Python • MATLAB • LaTeX• Java • HTML •Bash
Systems
ROS • GIT •OpenCV •Gazebo •Internet of Things

EXTRA-CURRICULARS

Elocution • Quizzing • Table Tennis

RESEARCH EXPERIENCE/ PROJECTS

AERIAL ROBOTICS KHARAGPUR | Control Systems and Embedded Electronics Team | February 2016 – Present
Guide: Prof. Somesh Kumar

- Made Simulink model of quadrotor along with PID control on MATLAB.
- Fabricated obstacle-avoiding skirt and algorithm for quadcopter.
- Designing control systems for a multicopter to take part in IARC 2017.
- Fabricating safety kill-switch according to IARC guidelines.

SWARM ROBOTICS | Embedded Electronics Team | October 2016 – Present
Guide: Prof. Somesh Kumar

- Accomplished communication between robots using nRF transcievers.
- Interfaced Xbee modules with Raspberry Pi for robot localization.
- Conceptualized model of swarm robots using ESP8266 modules.

MOTION IMITATING AND PATH REPLICATING ROBOT | Project Head & Instructor | December 2016

- Accomplished IEEE certified project of making an autonomous robot which could imitate motion of another robot on ATmega16 and Arduino.
- Mentored a team of 30 students.

STEP COUNTER HEADING FOLLOWING ROBOT | Project Member | December 2015

- Accomplished IEEE certified project of making a semi- autonomous robot which could follow a human on ATmega32.

HEX-DECODING AND PATH PLANNING ROBOT |Team Leader | January 2016

- Built an autonomous robot which could decode hex-encoded data from IR LEDs and reach its destination, Kshitij '16, IIT Kharagpur.

POSITIONS OF RESPONSIBILITY

TECHNOLOGY ROBOTIX SOCIETY | Sub-head | February 2016 - Present

- As part of the university's official robotics and hobby maker group, conducted the largest robotics related fest in India, Robotix 2016.
- Spearheaded multiple workshops across India to spread the culture of robotics.

KRAIG | Instructor | February 2016 - Present
Kharagpur Robotics and Artifical Intellgence Group

- Organized weekly lectures on Manual and Autonomous Robotics for over 200 first year students round the year.
- Conceptualized 10 IEEE certified projects for over 800 students.

SCHOLASTIC ACHIEVEMENTS

Sept, 2016 — 4^{th} in Event Sensorous, National Students' Space Challenge'16
Jun, 2015 — Qualified JEE Main and Advanced for science & engineering education entrance in India with percentiles of 98.97 (All India Rank 3030) and 96.5 (All India Rank 5263) respectively.