

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 & Prof. Jayanta Mukhopadhyay

- 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 | September 2016 – Present

Guide: Prof. Somesh Kumar & Prof. Pallab Dasgupta

- Accomplished communication between robots using nRF transceivers.
- 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 Artificial Intelligence 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

Jun, 2015

4th in Event Sensorous, National Students' Space Challenge'16

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.