# Aman Chandra

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# EDUCATION

# **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 Robotix://team

# **COURSEWORK**

Programming & Data Structures Partial Differential Equations 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

Eloquent Speaker • Avid Quizzer • **Table Tennis** 

# RESEARCH EXPERIENCE/ PROJECTS

# INDIAN INSTITUTE OF TECHNOLOGY, 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.
- 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

- Interfaced nRF transceivers with Arduino for communication between multiple robots.
- Interfaced Xbee modules with Raspberry Pi for robot localization.

#### 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 ATmega 16 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<sup>th</sup> in Event Sensorous, National Students' Space Challenge'16 Qualified JEE Main and Advanced for science & engineering Jun, 2015 education entrance in India with percentiles of 98.97 (All India Rank 3030) and 96.5 (All India Rank 5263) respectively.