# Rahul Kumar

D 410, Nehru Hall, Indian Institute of Tehnology, Kharagpur West Bengal, INDIA - 721302

Mobile No.: 7427973355

Email-id: vernwalrahul@iitkgp.ac.in

Github: https://github.com/vernwalrahul/

#### **ACADEMIC DETAILS**

Education	Institute	Year	CPI / %
B. Tech: Computer Science and Engineering	IIT Kharagpur	2016- Till date	9.71 / 10
Intermediate	DAV KDPS, Ranchi	2014 - 2016	95.4 %

#### **MAJOR PROJECTS**

- Kharagpur RoboSoccer Students' Group (Research Project) http://krssg.in/ (Guide: Prof. Jayanta Mukhopadhyay, Feb'17 - till date)
  - Implementing codes to make autonomous soccer playing bots. .
  - o Research Areas: multi-agent robot system, Path Planning, Computer Vision.
- Action/Event Recognition for Safety Analytics (Research Project)

(Guide: Prof. Pabitra Mitra, Dec'17 - till date)

• Research Areas: Computer Vision, ConvNets, Encoder-Decoder models.

#### • RRT Simulator

Developed an interactive GUI interface to simulate a path generated by RRTs avoiding obstacles using C++ and PyQt. https://github.com/vernwalrahul/RRTSimulator

### • Movie Recommendation System

A movie recommendation system using collaborative filtering and regression algorithm trained on movielens dataset. https://github.com/vernwalrahul/Recommendation-system

# **EXPERIENCE**

• Instructor (MIT-IIT Robotics Workshop)

(Guide: Prof. Sudeshna Sarkar ,1st May'17 -15th May'17)

- We conducted a fortnight long Robotics workshop for higher school students
- Executive Head (Kharagpur Open Source Society) https://kossiitkgp.in/ (Guide: Prof. Animesh Mukherjee ,Jan'17 - till date)
  - We conducted git and basic linux workshop for first and second year undergraduates at IIT Kharagpur.
  - o Organized open source workshop for the students of NIT Sikkim, India.
- Image Processing Mentor (IEEE Robotics Winter Workshop)

We conducted a week-long IP workshop for first and second year undergraduates at IIT Kharagpur. I taught basic Image Processing using OpenCV and C++.

#### **AWARDS AND ACHIEVEMENTS**

• Robocup 2017.

First team from India to qualify for SSL, Robocup 2017 held in Japan, among top 24 teams across the globe.

• Best Fresher, Conquest, Kshitij 2017.

Participated in an Robotics Event at Kshitij 2017, Asia's largest techno-management fest. Awarded the best fresher at IIT Kharagpur.

• KVPY 2016. All India Rank 9

Secured All India Rank 9th in one of the presitigious examination initiated by Department of Science and Technology, Government of India

# **TECHNICAL SKILLS**

• Languages C, C++, Python, Matlab, LATEX Libraries and Tools Tensorflow, OMPL, OpenCV, ROS, PyQt, Octave Field of Interest Computer Vision, Path Planning, Machine Learning.