Rajendra Singh

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Phone : +91 7073091997
Web : Linkedin, Github, website
DOB : 27th Nov 1997

Fourth year
Computer Science and Engineering
Indian Institute of Technology, Palakkad

SUMMARY

- Skilled in Robotics, ML, DL and AI.
- Interned with UST Global, Researshala and IIT Madras.
- Former Head, Robotics club, IIT Palakkad
- Selected for KVPY fellowship.
- IIT-Jee 99.3 percentile.

EDUCATION

Program	Institution	%/CGPA	Year of Completion
B. Tech	Indian Institute of Technology, Palakkad	7.19 (Till VI Semester)	2020
XII	Delhi Public School, Udaipur	89%	2016
X	Delhi Rajasthan Public School, Rajsamand	96%	2014

SCHOLASTIC ACHIEVEMENTS

- Qualified for Round 2, Smart India Hackerthon Hardware edition. 2019
- Winner, Kaizen Robotics Program Competition, Lema labs. 2017
- Awarded KVPY Fellowship by DST, Govt. of India. 2016
- Qualified IIT-Jee Advanced 2016 with a percentile of 99.3 amongst a total of 1.2 million students. 2016
- Ranked First, Science Quiz by Science and Technology Department, Rajasthan. 2014
- In top 10, Class X, Board of Secondary Education, Rajasthan. 2014
- Best Student of Year Award 2014–15, Rajsamand District Private Education Committee. 2014
- Awarded Merit Scholarship Class IX, Army Welfare Education Society. 2013

TECHNICAL SKILLS

- **AI and Robotics**
  I'm skilled at ROS, RL, brain computer interface, embedded system, robot control and manipulation.
- **Deep learning and data science**
  I've done several projects on NLP and CNN.
- **Competitive Programming**
  I participated in various competitions and have strong hold on C, C++ and Python.
- **CSE Basics**
  In depth knowledge of Data structures and Algorithms, DBMS, OS, Computer networks and Compilers.
- **Hardware**
  Rplidar A2M8, Realsense D435, GstarIV GPS, Nvidia Jetson(Tx2, nano), Raspi3B+, Zybo FPGA, Arm Cortex-M0+ , Atmega16, NodeMCU, GSM, Pyboard, OpenMV

SELECTED PROJECTS

- Implemention of **slam** on AGV by sensor fusion of data from 2D lidar and 3D camera.
- Vision based control and trajectory planning of **robotics manipulator** using pointcloud data.
- Path planning for **swarm** of two drones, for Smart India Hackerthon 2019.
- Built **EOG** based typing system for individual with motor neuron diseases.
- Built automated **toilet cleaning** robot, Ranked 6th in Inter IIT 2017-18, IIT Madras.
- Build model for **satellite image classification** using just 14 images, for Inter IIT 2018-19, IIT Bombay.
- Built POC for **IOT** based autonomous farming under Makerthon 2017, Lema Labs, IIT Madras Research Park.
- Build **ROS** based surveiling robot.
  For more projects, please visit: https://iamrajee.github.io/projects/

EXPERIENCES

- Summer intern UST Global, Trivandrum   May-July, 2019
  Implemented SLAM and robot manipulation.
- Data Science intern, Researchshala, Chandigarh   May-July, 2018
  Worked on various NLP techniques
- Vistaar Program, IIT Madras   May-June, 2017
  Built Prusa i3 3D Printer and 3D Printed Robotic Arm

RELEVANT COURSES AND WORKSHOPS

Courses
- Probability, Linear Algebra
- ML, AI, RL and DL
- Robot manipulation and control

Workshops
- Machine Learning Workshop
- Robotic Basics and Advance Workshop
- IOT Workshop

POSITION OF RESPONSIBILITY

- Head of Robotics Club, IIT Palakkad   July 2018 - May 2019
- Event cordinator, Rajasthan-Assam, EBSB, IIT Palakkad   January 2019

EXTRACURRICULAR ACTIVITIES

- Active member of Data Analysis and Coding Club, IIT Palakkad
- Teaching at secondary school of Palakkad under NSS, IIT Palakkad

REFERENCES

- **Mr. Ashok Nair**
Director Service Delivery,
UST Global, Thiruvananthapuram
E-Mail: Ashok.nair@ust-global.com

- **Mr. Shubham Jain**
Founder and CEO,
Researshala, Chandigarh
E-Mail: shubham@researchshala.com

- **Dr. Piyush P. Kurur**
Professor, Department of Computer
Science and Engineering, IIT Palakkad
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