

RAKESH BAL

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EDUCATION

Indian Institute of Technology Kharagpur

Undergraduate

Department of Computer Science and Engineering

July 2016 - Present

Overall CGPA: 9.56/10

Baxi Jagabandhu Bidyadhar Junior College

Intermediate In Science

+2 Science

July 2014 - May 2016

Overall Percentage: 89%

St. Joseph's High School

Indian Certificate of Secondary Education

Matriculation

April 2011 - May 2014

Overall Percentage: 96%

TECHNICAL STRENGTHS

Programming Languages

C, C++, MATLAB/Octave, Python, JavaScript

Software & Tools

LaTeX, ROS, Git, OpenCV, PyQt

Web Development

HTML, CSS

Machine Learning

TensorFlow, Scikit-Learn

RESEARCH EXPERIENCE

Autonomous UnderWater Vehicle, IIT Kharagpur

March 2017 - Present

Guide: Prof. C S Kumar

- Implementing Mission Planner on Kraken 4.0 based on Actionlib and Smach Packages of ROS.
- Implemented HSV Thresholding for buoy detection.
- Implemented Canny Edge Detector as part of Edge Detection using OpenCV in C++.
- Implementing Faster R-CNN for Real-Time Object Detection and Localization.

PROJECTS

Movie Recommender App-Synisto(Under Construction)

August 2017 - Present

IIT Kharagpur

- Used Collaborative Filtering based algorithm to train on Modified MovieLens Dataset.
- Added Recommendation for new users based on ratings of few movies.

ACADEMIC ACHIEVEMENTS

Ranked in National Top 0.014% (amongst 13,00,000 candidates) in JEE Mains 2016 and Top 0.13% (amongst 200,000 candidates) in IIT-JEE Advanced 2016

Qualified Kishore Vaigyanik Protsahan Yojana (Written and Interview) in SX stream (Organized by Indian Institute Of Science, Bangalore) with an All India Rank of 191.

Qualified National Talent Search Examination conducted by NCERT in Xth standard and had secured 3rd rank in the state level stage of the exam.

Qualified for Indian National Physics, Chemistry and Astronomy Olympiad conducted by HBCSE.

RELEVANT COURSES

Core Courses

Programming And Data Structures
Algorithms-I(ongoing)
Discrete Structures(ongoing)

Other Courses

Machine Learning (Coursera)
Deep Learning Specialization(Coursera)
CS231n: CNNs for Visual Recognition(ongoing)

POSITION OF RESPONSIBILITY

Spring Fest 2016

Crew Member

January 2017 - Feb 2017

IIT Kharagpur

- Managed the performance of international artists during the fest.
- Successfully organized Shuffle Event and prepared music tracks for the event.
- Managed the Youth Marathon during the fest.

EXTRA-CURRICULAR ACTIVITIES

Secured 4th position in the Science Quiz held by Institute Of Physics, Bhubaneswar.

Represented LBS Hall, IIT Kharagpur in Inter Hall Maths Olympiad General Championship.

Secured 5th position in Rakesh Memorial Chess Championship at Puri.

Qualified for semifinals of debating tournament conducted by Debating Society, IIT Kharagpur.