




# Kousik Rajesh

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## EDUCATION

### INDIAN INSTITUTE OF TECHNOLOGY, GUWAHATI

BTECH IN COMPUTER SCIENCE AND ENGINEERING  
Exp 2022

**9.66/10.0 Grade Point Average**

### RYAN INTERNATIONAL SCHOOL CBSE

2016 - 2018 | Greater Noida  
Senior Secondary: 97.4% | Ranked first  
High School CGPA: 10.0/10.0

## COURSEWORK

Deep Learning Specialization 

- Neural Networks
- Hyperparameter tuning
- Structuring ML Projects
- Convolutional Neural Networks
- Sequence Models

Machine Learning

Version Control with Git

Linear Algebra(Mathematics II)

Algorithms and Data Structures\*

System Software Lab\*

Discrete Mathematics\*

Probability Theory and Random Processes\*

Number Theory and Algebra\*

\* Ongoing courses

## SKILLS

### PROGRAMMING

**Languages:**

Python • C++ • C • JavaScript\* • Shell\*

**Frameworks and Libraries:**

TensorFlow • Keras • Pandas • Sklearn •

Numpy • OpenCV

**Miscellaneous:**

Data Analysis • Web Scraping • HTML •

CSS\* • ROS • Arduino • SQL •  $\text{\LaTeX}$ \*

\* Elementary Proficiency

## PROJECTS

### RAMAN | HUMANOID ROBOT

[VIEW !\[\]\(5ca7d0bd23567a9aa1f800590644baea\_img.jpg\)](#)

Ongoing | 4i Labs, IITG

- Project Raman is a powerful android robot being designed in the form of an adult human and supports face recognition, head tracking and chatbot capabilities
- Currently working on the hands and enabling Raman to replicate human poses in real time
- Tried implementing different convolutional models for 3D human pose estimation from RGB-D data captured using Intel® RealSense™ cameras.

### RUBIK'S CUBE SOLVER

[VIEW !\[\]\(6f570b68c0ee531e594eca882aeed36a\_img.jpg\)](#)

March 2019 | Robotics club, IITG

- A Rubik's cube solving bot using Computer Vision which scans and solves a 3x3 Rubik's cube
- Implemented a unique unsupervised learning based method for color classification of Rubik's cube
- Created a GUI for displaying cube state

### ROBOTIC ARM

[VIEW !\[\]\(a97e5ec31e247abfe5544bdfb2d7a4e9\_img.jpg\)](#)

October 2018 | Kriti 2018

- A 2 joint robotic arm that locates and pops balloons using computer vision
- Implemented a balloon detection system on OpenCV using image processing techniques such as filtering, HSV colour masking and contour detection

### CHAT STATS

[VIEW !\[\]\(ea1652d2273959de35bdc0e16ca197eb\_img.jpg\)](#)

Ongoing | Personal Project

- A tool which provides various statistics and visualisations of a chat history(WhatsApp/Telegram)
- Provides stats such as message frequency, time distribution of messages, average response time etc.

### BROWSING BAD

[VIEW !\[\]\(5fe20d230f80dac6f70ef21181cce44d\_img.jpg\)](#)

July-August 2019 | Technothlon 2019

- A multilevel interactive web-based puzzle game for the mains event of Technothlon
- Implemented front end of several interactive brain-teasers using Bootstrap and JavaScript

## POSITIONS OF RESPONSIBILITY

- Core Team Member at **IITG.AI**
- Core team Member at **4i Labs, IITG**
- Project Manager at **Equinox - Astronomy club, IITG**
- Organizer, **Technothlon**

## ACHIEVEMENTS

2018-2019 Top 10

2019 In National Top 25 teams

2017-2018 Top 1%

2015-2016 Top 1%

Ranked in Top 10 in the Institute

AI Hackathon organised by CDAC and NVIDIA

KVPY(SX) Fellowship

NTSE Scholarship