# Kousik Rajesh

🛅 kousik-rajesh | 🗘 kousikr26 | 🛣 kousikr26.github.io/ \$8860224067 | ■ kousikr26@gmail.com | kousik18@iitg.ac.in

## **EDUCATION**

# INDIAN INSTITUTE OF TECHNOLOGY, GUWAHATI

BTECH IN COMPUTER SCIENCE AND Engineering Exp 2022

9.30/10.0 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:

Git • Data Analysis • Web Scraping • HTML ACHIEVEMENTS

- CSS\* ROS Arduino SQL LATEX\*
- \* Elementary Proficiency

### **PROJECTS**

#### RAMAN | HUMANOID ROBOT

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

VIEW 🛂

VIEW 🔼

VIEW 🔼

VIEW 🔼

- 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<sup>TM</sup> cameras.

#### **RUBIK'S CUBE SOLVER**

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

#### **LEAF CLASSIFICATION**

October 2019 | Kriti 2019

- A convolutional model for leaf classification of the Northeastern United States 185 tree species dataset
- Achieved a classification accuracy of 88% on test data

**ENIGMA** VIEW 🔼

Ongoing | Personal Project

- Using Deep Learning to crack ciphers such as the Caesar and Vigenère cipher
- Implemented LSTM models which were able to learn the ciphertext with close to 100% accuracy

#### **BROWSING BAD**

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

2018-2019	Hacktobertest	Made 4 open source contributions
2019	2 <sup>nd</sup> position	Leaf classification ML hackathon
2019	In National Top 25 teams	AI Hackathon organised by CDAC and NVIDIA
2017-2018	Top 1%	KVPY(SX) Fellowship
2015-2016	Top 1%	NTSE Scholarship