Kousik Rajesh

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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
Probability Theory and Random Processes
Linear Algebra and Differential Equations
Algorithms and Data Structures
System Software Lab
Discrete Mathematics
Game Theory and Economics*
Design and Analysis of Algorithms*
Formal Languages and Automata Theory*

** 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 • CSS* • ROS • Arduino • SQL • LaTeX

** Elementary Proficiency*

PROJECTS

RAMAN | Humanoid robot

VIEW
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
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

VIEW
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

VIEW
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

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