Vatsal Goel

vatsalg29.github.io | github.com/vatsalg29
vatsal29@iitg.ac.in | linkedin.com/vatsalgl

EDUCATION

IIT GUWAHATI
B.Tech | Electronics & Electrical
2016-Present
- CGPA: 9.24

IIT GUWAHATI
B.Tech Minor | Computer Science
2016-Present
- CGPA: 8.75

KEY COURSES

Online
Deep Learning Specialization
Machine Learning
Computer Vision
Data Structures and Algorithms
AI for Robotics

Coursework
Probability and Random Processes
Linear Algebra
Advanced Control Systems
Pattern Recognition
Game Theory
Graph and Automata Theory
Advanced Calculus

SKILLS

Programming
Proficient
Python • Java
Experienced
C++ • C• MATLAB • HTML

Deep Learning
Frameworks
Keras • Tensorflow
Algorithms
DNNs • CNNs • RNNs

EXPERIENCE

Biomedical Imaging Algorithms Group, CTU | Research Intern
Summer 2019
- Investigated a deep recurrent visual attention model for predicting breast cancer on histopathology images.
- Currently developing a new pipeline on the same problem for better prediction.

PROJECTS

Robotic Human Palm Replication | IIT G
Jan 2019 - April 2019
- Designed a working model of a human palm which replicated the palm motion and controls using a video feed of a human palm through a web-cam.
- Worked on convolutional pose estimation algorithm and parsing the angle data to the motors through an Arduino. [Github]

Optical Character Recognition using Deep Learning | IIT G
Fall 2018
- Designed a model for detecting text handwriting from images of texts.
- Worked in keras using Convolutional Neural Networks (CNN) and Long Short Term Memory (LSTM) cells. [Github]

Safety device for Fishing Vessels | Inter-IIT Tech Meet 2018
Winter 2017
- Designed a cost-effective system to alert fishing trawlers and other miniature vessels about approaching ships so that they can safely manoeuvre away from them.
- Worked with nRF sensors , AIS signals, Antennas and Distress Systems. [Github]

ACHIEVEMENTS

Inter IIT Tech Meet 2018
- Obtained a bronze medal for the project "Safety device for Fishing Vessels" competing against 18 other IITs.

Joint Entrance Examination Advanced 2016
- Secured All India Rank 1471 in one of the most competitive entrance exams of India among 150,000 candidates shortlisted for the test through JEE Mains.

Joint Entrance Examination Mains 2016
- Secured All India Rank of 1548 among 1.1 million candidates appearing for the test.