Vatsal Goel

B.Tech - Electronics and Electrical Engineering Minor - Computer Science and Engineering Indian Institute of Technology Guwahati

+91-7709082210 vatsalgoel.98@gmail.com vatsal29@iitg.ac.in www.linkedin.com/in/vatsalgl

EDUCATION

Degree/Certificate	Institute/Board	CGPA/Percentage	Year
B.Tech	Indian Institute of Technology, Guwahati	9.15 (Current)	2016 - Present
Senior secondary	Maharashtra State board	87.8%	2016
Secondary	ICSE board	96.4%	2014

PROJECTS

· Optical Character Recognition using Deep Learning

Ongoing

Designed a model for detecting text handwriting from images of texts.

bit.ly/2MNUiln

- Worked in keras using Convolutional Neural Networks (CNN) and Long Short Term Memory (LSTM) cells.
- Currently working on word segmentation techniques.
- · Autonomous Robot for Library Enhancement

Project under 4i Labs, Robotics Club, IIT Guwahati (8 member team)

Ongoing

- · An initiative to make IITG library the first automated library which allows human intervention and increase the efficiency of book searching and arranging in the shelves.
- Worked with robotic localization, mapping and bar-codes.
- Currently working on object detection (static and dynamic) using Deep Learning and Computer Vision.
- · Safety device for Fishing Vessels

Winter 2017

Inter-IIT Tech meet 2018 (4 member team)

bit.ly/2xvAwkH

- 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, Uni-directional Antennas and Distress Systems.

TECHNICAL SKILLS

- Programming languages: C, C++, Python, Java, HTML *, CSS *, Octave *
- Miscellaneous : Machine Learning, Deep Learning
- Libraries: Numpy, Tensorflow*, Keras
- Operating system: Windows, Linux *
 - * Elementary proficiency

KEY COURSES TAKEN

- Machine Learning (Coursera)
- Deep Learning Specialization (Coursera)
- · Data Structures and Algorithms
- Probability and Random Processes
- AI for Robotics (Udacity)

- · Analog Circuit Design
- · Graph and Automata Theory
- Digital Circuits and Microprocessors
- Advanced Calculus
- · Linear Algebra

POSITIONS OF RESPONSIBILITY

- Core Team, Techniche 2018 (The annual Techno-Management Fest of IIT Guwahati).
 - Managed a team of 10 members, responsible towards bringing international exhibitions and speakers consisting of some of the most influential leaders in the industry.
- Branch Representative, Electronics and Electrical Engineering, Pre Final Year (2018-2019)
- Core Team, Guwahati Half-Marathon 2018 (The largest half-marathon organized in North East India)
- Organizer, Industrial Conclave, and Exhibitions, Techniche 2017.
- City Representative Pune, Technothlon 2018 (largest student-organized logic exam in India).

ACHIEVEMENTS

- **Inter IIT Tech Meet 2018 :** Obtained a bronze medal for the project "Safety device for Fishing Vessels" competing against 12 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.