



# Varshil Gandhi

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## EDUCATION

### IIT GUWAHATI

**B.TECH : ELECTRONICS & ELECTRICAL ENGINEERING**  
Expected May 2020 | Guwahati, India  
Majors CPI: 9.25/10  
**MINORS : COMPUTER SCIENCE & ENGINEERING**

### NAVRACHANA VIDHYALAYA

**HIGHER SECONDARY**  
Grad. May 2016 | Vadodara, India

## LINKS

Github:// [vlg28](#)  
LinkedIn:// [varshilgandhi](#)  
Twitter:// [@varshilgandhi28](#)

## COURSEWORK

### UNDERGRADUATE

Advanced Control Systems  
Data Structures & Algorithms  
Probability & Linear Algebra  
Random Processes \*  
Introduction to Machine Learning  
Game theory & Economics  
Signals, Systems & Networks  
Complex & Real Analysis  
Digital Circuits & Microprocessors

### ONLINE COURSES

Reinforcement Learning  
Machine Learning  
Deep Learning & Neural networks

\* To be completed by Nov 2019

## SKILLS

### PROGRAMMING

Over 5000 lines:  
Python • Arduino IDE code  
Over 1000 lines:  
C • C++  
Familiar:  
Matlab • Shell Scripting • HTML • Java

### MISCELLANEOUS

Tensorflow • Raspberry Pi • Git • Gazebo\*  
• OpenAI Gym • ROS\* • ScikitLearn\*

\* Elementary expertise

## EXPERIENCE

### IIT MADRAS | RESEARCH INTERN UNDER PROF. BALARAMAN RAVINDRAN

May 2019 – July 2019 | Chennai, India  
The project was directed towards designing better end-to-end imitation learning models for autonomous driving scenarios and understanding the importance of relational modules for transfer learning and overall performance.  
**TAG** : Imitation Learning • Deep Learning • Autonomous Driving

### INTEL LABS | RESEARCH INTERN

May 2018 – July 2018 | Bangalore, India  
The Project was focused on developing Reinforcement learning & Imitation Learning algorithms and techniques for intelligent learning of robotic systems as collaborative multi-agents.  
**TAG** : Deep Reinforcement Learning • Imitation Learning • Robotics

## PROJECTS

### AUTOMATED ROBOT FOR LIBRARY ENHANCEMENT (ARLE) |

#### 4I LABS, IITG

July 2017 – May 2019 [github.com/vlg28/ARLE](https://github.com/vlg28/ARLE)  
Target is to automate the work done in arranging the books in the library shelves through a movable wheeled robot in human intervened environment. I worked upon SLAM, indoor navigation, designing and 3D modelling of the bot.

### LOW COST SAFETY DEVICE FOR SHIPPING VESSELS | 6TH

#### INTERIIT TECHMEET

Oct 2017 – Jan 2018 [github.com/vlg28/ShipDetection](https://github.com/vlg28/ShipDetection)  
Lead the development of a low cost warning device for small ships to avoid accidents with giant ships. Our team devised a novel idea of measuring power decay of EM signals for distance and direction approximation.

### INTER-DISCIPLINARY PROJECTS | GITHUB

May 2017 - Present | Links in Github

These projects vary from Reinforcement Learning, Deep learning, NLP to Robotics, Networking and Assembly Language Coding.

## AWARDS

2019	2nd/48	Dept Rank, IIT Guwahati
2018	3rd	6th InterIIT TechMeet, IIT Madras
2016	1915/0.2 million	JEE Advanced National Examination
2016	529/1.2 million	JEE Mains National Examination
2016	Research Fellowship	Kishore Vaigyanik Protsahan Yojna (KVPY)
2016	7th/0.5 million	Gujarat State Board Examination (GSEB)
2012	Silver Medalist	IRIS National Science Fair by Intel, CII and DST

## POSITION OF RESPONSIBILITY

2018-2019	Project Manager	Robotics Club, IITG
2017-2018	Technical Panel Member	Hostel Technical Board, IITG
2017-2018	City Representative	Technolthon
2005-2014	National Champion	Roller Speed Skating : Sports