

# Harshit Sikchi

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## EDUCATION

### IIT KHARAGPUR

#### BTECH IN COMPUTER SCIENCE

Expected July 2019 | Kharagpur,India  
Cum. GPA: 8.96

### D.A.V PUBLIC SCHOOL

#### SENIOR SECONDARY, GRADE 12

Kota,Rajasthan,India  
96 Percentage,CBSE Board

### GOLDEN KIDS HIGH SCHOOL

#### HIGHER SECONDARY, GRADE 10

Amravati,Maharashtra, India  
97.27 percent SSC Board

## LINKS

Github:// [hari-sikchi](#)  
LinkedIn:// [Harshit Sikchi](#)  
Codechef:// [king-coder](#)

## CS COURSEWORK

Algorithms-1  
Discrete structures  
Signals and Networks  
Introduction to electronics

### ADDITIONAL

CS-50  
Introduction to image processing  
CS-231N-Deep learning in Image processing  
Machine learning(Coursera)  
Algorithms-I (Stanford)  
Algorithms-II(Stanford)

## SKILLS

### PROFICIENT

C • C++ • Python • OpenCV  
ROS • Algorithms • GIT  
• Tensorflow •

### INTERMEDIATE

HTML • CSS • Javascript • Web development • C

### FAMILIAR

App Development

## AWARDS AND ACHIEVEMENTS

2015	<b>ALL INDIA RANK 227</b>	JEE Advanced among 150,000 candidates
2015	<b>ALL INDIA RANK 29</b>	KVPY,IISc scholarship awardee
2015	<b>ADITYA BIRLA SCHOLARSHIP</b>	Among Top 16 students from India
2014	<b>TOP 1 PERCENT</b>	Indian Astronomy Olympiad
2013	<b>DISTRICT RANK 1</b>	Maharashtra board 97.27percent(SSC)

## PROJECT AND INTERNSHIPS

### AUTONOMOUS GROUND VEHICLE | MAR'15 - PRESENT

Indian Institute of Technology,Kharagpur

- Successfully implemented and tested two path planning algorithms for Bot Eklavya 5.0 (Ackermann drive vehicle).
- Designed an algorithm for lane-navigation using RANSAC and tested thoroughly to eliminate all corner cases.
- Implemented the CHEVP algorithm for lane detection and combined it with B-snake spline detection curve.
- Worked on sbpl planner.
- Worked with 3D Lidar,Sterocam, 2D Lidar.

### HARDWARE MODELLING PROJECT | AUTONOMOUS VEHICLE FOR HANDICAPPED

Nov 2015 – Dec 2015 | LBS Hall,IIT Kharagpur

- Developed a lane-detection cum navigation software for autonomous behaviour of the bot.(For Indoor Environment only ).Obstacle avoidance is done by lidar only.
- The bot served as an attachment to a wheelchair that arrives at the wheelchair autonomously and needs to be attached.

### DRIVER SIMULATOR PROJECT August-September | IIT Kharagpur

- Worked on how pre-processing the data of cameras mounted in car using BCD(binary colour decomposition) helps in improving accuracy of the output.
- Presently working on implementation of end to end learning to make a driver simulator.

### AGNEXT RESEARCH Ongoing | IIT Kharagpur

- To make a image processing + deep learning module to identify crop infection and diseases and warn beforehand.\*\*ongoing

## MISCELLANEOUS

- Built a app in codefundo microsoft
- State Level Badminton Player
- A competitive programming enthusiast

## INTERESTS

### ALGORITHMS

Machine Learning

Computer Vision

Driverless Cars