

# Saksham Katiyar

I'm looking for an enthusiastic team to work for that will provide me with challenging work that I can learn from and contribute to. I'd love to delve deeper in the field of coding and robotics.

## EDUCATION

### JSSATE, NOIDA

B.TECH IN ELECTRONICS AND  
COMMUNICATION ENGINEERING  
2015 - 2019 | AKTU  
Agg. Percent: 66.28%

### VSEC, KANPUR

INTERMEDIATE 10+2  
2013 - 2015 | ISC  
Agg. Percent: 93.75%

### HIGH SCHOOL 10

2011 - 2013 | ICSE  
Agg. Percent: 89.80%

## LINKS

Phone: +91 8400 6780 75  
Gmail:// [saksham0katiyar](mailto:saksham0katiyar)  
Github:// [sakshamkatiyar](https://github.com/sakshamkatiyar)  
LinkedIn:// [sakshamkatiyar](https://www.linkedin.com/in/sakshamkatiyar)

## COURSEWORK

Data Structure & Algorithms  
Control Systems  
Digital Signal Processing  
Advanced Electronics System  
Microprocessor + Practicum  
Digital Design using Verilog + Practicum  
VLSI Design + Practicum

## SKILLS

### PROGRAMMING

Python • Java • C • Embedded C  
Verilog • VHDL •  $\text{\LaTeX}$  • Assembly

### TOOLS

OpenCV • ROS • AWS • MATLAB  
Xilinx • VirtualBox • fritzing • Git

### HARDWARE

Arduino • Raspberry Pi • ESP 8266  
MSP430 • CC3200 • 8085 • 8051

## RESPONSIBILITIES

- Technical Head Quanta, ECE Dept.
- Lab Coordinator, Embedded Systems & Robotics Lab

## EXPERIENCE

### LEAST COUNT — Computer Vision Intern

June 2018 – July 2018 | IIT-M Research Park, Chennai

- Work related to face recognition and manipulation.
- Created database on AWS, then implemented machine learning models to detect various features of face and quantifying them.
- All code was reviewed, perfected, and pushed to production.

### SHELLIOS TECHNOLABS — Product Development Intern

Feb 2018 – March 2018 | JSS Step, Noida

- Deploying Cloud Services and managing distributed database on AWS.
- Created a backbone-like framework for the cloud data storage directly from ESP32.

## PROJECTS

### E-TOLL SYSTEM — Raspberry Pi, OpenCV, Python

May 2018 – June 2018 | Smart India Hackathon, Finalist

- An advanced toll collection system based on Computer Vision, where one RPi was used as a database server while other as a client.
- Matched the Number Plate with the QR Code and opened the barrier.
- Exceptions were suitably handled.

Link - <https://goo.gl/iDRZnY>

### DRONE LOCALIZATION AND NAVIGATION — ROS, Python

October 2017 – March 2018 | e-Yantra IIT-B, Finalist

- A drone based project that involves automatic stabilization and localization of a quadcopter.
- I contributed in Python and ROS. Gazebo simulator was used prior to implementation.

Link - <https://goo.gl/b8FHdP>

### CRATER AND OBSTACLE AVOIDING BOT — OpenCV, Python

October 2016 – March 2017 | e-Yantra IIT-B, Semi-Finalist

- I wrote the python script to read the feed from the overhead camera and detected the location of craters and obstacles through image processing.
- Then sent the location to Firebird V via ZigBee to traverse the arena and reach the final location.

Link - <https://goo.gl/ddYAg9>

- |                                 |                 |
|---------------------------------|-----------------|
| • Optical Character Recognition | ML              |
| • Hand Gesture controlled Bot   | Arduino         |
| • Maze Solving                  | Computer Vision |

## ACHIEVEMENTS

2018	National	Finalist	Kronothn 2.0
2017	National	4 <sup>th</sup> /202	Team Leader e-Yantra, IIT-B by MHRD
2017	College	Hosted	Embedded Systems Workshop
2016	National	Semi-Finalist	Team Leader e-Yantra, IIT-B by MHRD
2016	International	Volunteer	International Cultural Team, WCF