

# Hemant Singh

Bachelor of Technology  
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## EDUCATION

### MNIT JAIPUR

B.TECH IN ELECTRICAL  
ENGINEERING  
2013 - 2017  
CGPA : 8.11/10

### KENDRIYA VIDYALAYA NO 1

Class XII  
Aggregate : 95.60%  
Class X  
CGPA : 9.6/10

## LINKS

Github:// [hemant-1332](#)  
LinkedIn:// [hemantsingh-ee1332](#)  
Academia:// [HemantSingh](#)

## COURSES

### UNDERGRADUATE

Modern Control System  
Communication systems  
Digital Signal Processing  
Signals and Systems  
Network Theory

### ONLINE COURSEWARE

Intro to Machine Learning - Udacity

## SKILLS

### LANGUAGE

Python • C

Familiar:

CSS • HTML •  $\text{\LaTeX}$

### SOFTWARE

Matlab • Proteus • PyCharm

• Arduino IDE

### HARDWARE

Arduino • RPi • ESP8266

### OS

Windows • Linux

## INTEREST

### ACADEMICS

• Computer Vision

### HOBBIES

• Reading

## INTERNSHIP

### RAJASTHAN ELECTRONICS & INSTRUMENTS LIMITED | SUMMER TRAINING

May 2016 - July 2016 | Jaipur, India

• Solar photovoltaic module development, Off-the-grid and Grid connected solar system, PCB design and assembling, Quality Assurance of electronic products

### SIEMENS LTD | SUMMER INTERN

July 2015 | Gurgaon, India

• Trained in Power Generation department of SIEMENS LTD INDIA. Major topics covered under training period were :  
• Power plant layout • Emergency diesel gen-set • Earthing fundamentals- design and calculation • LV and MV cable selection and sizing

## PROJECTS

### A SMART ANIMATRONIC HUMAN FACE | FINAL YEAR B.TECH PROJECT

Dec 2016 - May 2017

• Developed a personal assistant robotic face that can interact with the user and respond to commands with the help of audio-visual support system.

Key features includes :

- 3D printed facial parts made out of ABS material
- Voice command based motion ( eg. surprise, laugh, turn left)
- Human face detection and recognition
- Real-time face tracking
- Audio and visual based question-answering system
- Hardware was interfaced with Raspberry Pi and programming was done in Python on a Linux based machine.

### IOT BASED DIGITAL FARMING | GE EDISON CHALLENGE 2016

Jan 2016 - March 2016

- Designed and developed an automatic irrigation system based on real-time monitoring of field using sensor node, WSN and Android app interface.
- Used ESP8266 Wi-Fi module to send the sensor data to ThingSpeak platform over the Internet.
- Selected in top 5 teams based on working prototype in the finals of GE EDISON CHALLENGE 2016 held at GE India Technology Center, Bangalore.

### ELECTRIC VEHICLE | INDO-ASIAN SOLAR VEHICLE CHALLENGE 2015

Dec 2014 - April 2015

- Designed and developed Solar-cum-battery powered rear-wheel drive electric vehicle (EV).
- The design of EV was 3-wheeled tadpole-shaped powered by BLDC hub motor with a battery bank of 4 lead-acid batteries.

## EXTRA-CURRICULAR

- Won 2nd prize in CIRKART-Circuit making competition at Blitzschlag 2016- Annual Techno-Cultural Festival of MNIT Jaipur.
- Attended seven day Robotics Workshop organized by Robotics & Research group, MNIT Jaipur.