

Saksham Katiyar

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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

Github:// [sakshamkatiyar](#)

LinkedIn:// [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 • C • Embedded C • Java

Verilog • VHDL • \LaTeX • Assembly

TOOLS

ROS • OpenCV • AWS • MATLAB

XiLinx • VirtualBox • fritzing • Git

HARDWARE

Arduino • Raspberry Pi • ESP 8266

MSP430 • CC3200 • 8085 • 8051

OTHER DETAILS

RESPONSIBILITIES

Technical Head Quanta, ECE Dept.

Lab Coordinator, Embedded Systems &
Robotics Lab

LANGUAGES

English - Proficient

Hindi - Native

Spanish - Beginner

EXPERIENCE

LEAST COUNT | COMPUTER VISION INTERN

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

- Work related to face recognition and manipulation.
- Creating database on AWS, then implementing 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.

MNNIT | VLSI DESIGN AND EMBEDDED SYSTEMS TRAINEE

June 2017 – July 2017 | MNNIT, Allahabad

- Synthesis and simulation of circuit designs on Xilinx ISE using Verilog. Worked on Mentor Graphics to design the layout of IC and implementation on FPGA Kit.
- Learned the basic concepts of embedded systems and to program in assembly language on 8051 microcontroller and then using Embedded C programming.
- Beside the mini projects, the major projects were realization of Wallace Tree Multiplier and Light to frequency converter on trainer kit.

PROJECTS

E-TOLL SYSTEM | RASPBERRY PI, OPENCV, PYTHON

May 2018 – June 2018 | Smart India Hackathon, Finalist

An advanced toll collection system based on IoT, where one RPi was used as a server maintaining database while other as a client. Number Plate was detected and matched to the database and toll was collected or exception was suitably handled.

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. It was developed using Python and ROS. Gazebo simulator was used prior to implementation

CRATER AND OBSTACLE AVOIDING BOT | OPENCV, PYTHON

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

This project shows how advance concepts of image processing can be used to process the image through a mounted camera and solve the problems related to traversing on unknown terrain with craters and other rocks while reaching the desired place.

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

ACHIEVEMENTS

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