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.

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
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

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.

ECED 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 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	Kronothon 2.0
2017	National	4^{th}/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