Rishabh Handa

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EDUCATION

EXPERIENCE

JSS ACADEMY OF TECHNICAL PARAGRAPH TECHNOLOGIES | EMBEDDED INTERN **EDUCATION. NOIDA**

B.Tech (Electronics and

COMMUNICATION)

2015-2019 | AKTU Percentage: 69.27%

DPVN. KANPUR

XII (SENIOR SECONDARY)

2013-2014 | CBSE Board

Percentage: 92.60%

DPVN, KANPUR

X (SECONDARY)

2011-2012 | CBSE Board

CGPA: 9.2/10

LINKS

Github:// RHanda02 LinkedIn:// rishabhhanda

COURSEWORK

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

SKILLS

PROGRAMMING

Python • C • Embedded C • Verilog VHDL • MATLAB • Assembly

TOOLS

ROS • Xilinx • MATLAB • Git fritzing • Cadence-OrCAD

HARDWARE

Arduino • Raspberry Pi • ESP 32 MSP430 • CC3200 • 8085 • 8051

OTHER DETAILS

RESPONSIBILITIES

Member of Core Team Committee JSS Lab Coordinator, Embedded Systems & Robotics Lab

LANGUAGES

English proficient • Hindi • Punjabi

July 2018 - Sept 2018 | Noida

- Programming on Arduino, ESP8266 and ESP32.
- Research to innovate a new and efficient method for digital writing.
- A low cost digital writing concept was developed and a patent application was filed for the same.

SHELLIOS TECHNOLABS | PRODUCT DEVELOPMENT INTERN

Feb 2018 - March 2018 | JSS Step, Noida

- Programming on ESP32 for the working of the Idea.
- Hardware testing and suggesting ways to improve it if the tests fail.

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 micro-controller 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

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.

SMART HOME | ARDUINO, ESP32

SEPTEMBER 2017 - OCTOBER 2017 | Self practise

A Smart home project using different sensors like Temperature and Humidity sensor(for automatic appliances control), Rain sensor(for protecting clothes from rain), IR sensor, LDR(for automatic curtain control) etc.

MUSICAL NOTE IDENTIFICATION AND PLAYING VIA ROBOT

PYTHON, AUDIO PROCESSING, EMBEDDED C

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

A Python based program that can process the audio file and extract the Musical Notes from it. The task was to extract the notes and transfer it to the robots that can process it, play the same notes by striking pipes kept on the arena and display the same on its screen.

ESP Programming • Audio Recording • Hand Gesture controlled Bot Arduino

Embedded C • Maze Solving

ACHIEVEMENTS

| 2018 | National | Finalist | Kronothon 2.0 |
|------|----------|---------------|----------------------------|
| 2017 | National | 4th/202 | E-Yantra, IIT-B under MHRD |
| 2017 | College | Hosted | Embedded Systems Workshop |
| 2016 | National | Semi-Finalist | E-Yantra, IIT-B under MHRD |
| 2016 | College | Hosted | Manual Robotics Workshop |