





PRANAV SHARMA

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❖ EDUCATION

Oct 2019 – Present

MASTER OF SCIENCE | COMMUNICATIONS & MULTIMEDIA ENGINEERING

FRIEDRICH ALEXANDER UNIVERSITÄT, ERLANGEN-NÜRNBERG

Major Courses: Digital Communications, Convex Optimization in signal processing and communications, Digital Signal Processing and Statistical Signal Processing.

Aug 2015 – Jun 2019

BACHELOR OF ENGINEERING | ELECTRONICS ENGINEERING

MADHAV INSTITUTE OF TECHNOLOGY AND SCIENCE, GWALIOR

CGPA: 8.73/10

Major Courses: Engineering Mathematics, Electrical Engineering, Analog and Digital Communication, Signals and Systems, Control Systems, Digital Signal Processing, Electronic System Design and Neural Networks and Fuzzy Systems.

❖ PROJECTS

Dec 2018 – May 2019

PATIENT MONITORING SYSTEM USING IOT

To deal with the large death losses due to ill monitoring of patients in hospitals, a compact device with medical-sensors was developed which records patient's health data like Temperature, Pulse rate etc. every interval and save them on online server like google drive which can be accessed by doctor anytime, and anywhere. It also give patient a facility to call concerned nurse/doctor by pressing the panic button on device.

Sep 2018 – Nov 2018

IMAGE FILTERING USING FPGA IMPLEMENTATION

The project idea was to explore the research domain in image processing using FPGA. In this project, MATLAB is used to generate and simulate HDL codes for filtering salt and pepper noise from an image. The generated HDL source code and HDL Testbench were tested on XILINX software which gave us the desired results.

May 2018 – Jul 2018

CAMERA CONTROLLED ARMED ROBOT

In this project, the 7- DOF robot was developed which can identify the objects based on template or color, and can pick & place the object at designated places respectively with the help of camera installed above the space. The project involves several disciplines like Image processing and robotics.

Dec 2017 – Jan 2018

INDUSTRIAL PROJECT

In this project, I worked at Siemens Solution Partner Company i.e. Smart Controls India. Here, I learned how to program the PLC and write the algorithm for controlling the industrial motors in plant according to real time based inputs and conditions.

Aug 2017 – Nov 2018

MICROCONTROLLER PROJECTS

These projects consist of several robots which are designed to operate on the basis of different sensor inputs.

❖ WORK EXPERIENCE / INTERNSHIPS

May 2018 – Jul 2018

RESEARCH STUDENT

INDIAN INSTITUTE OF TECHNOLOGY, KANPUR

TASKS: Developed the design of robot, researched and contributed the algorithms for image processing and motion planning.

Dec 2017 – Jan 2018

INTERN

SMART CONTROLS PVT LTD (Siemens Solution Partner)

TASKS: Developed an algorithm for controlling the motors of the industrial plant according to real time inputs and conditions using a programmable logic controller.

❖ SKILLS

- **PROGRAMMING LANGUAGES** – C, C++ and MATLAB
- **CERTIFICATE COURSES** – Embedded Systems, Design of internet of things(IOT), Microprocessors and Microcontrollers
- **HARDWARE PROGRAMMING** – Arduino, VHDL, Embedded C
- **SOFTWARES** – MATLAB, Siemens TIAV14, Xilinx, Arduino IDE.

❖ LANGUAGE SKILLS

- ENGLISH – Fluent (IELTS – 7.5)
 - GERMAN – Basic (A2.1)
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❖ HONORS & AWARDS

- One of the four students who were selected from all over the country to work as a research student at the Indian Institute of Technology, Kanpur in year 2018.
 - Awarded by the honorable chief minister of State Madhya Pradesh, India for being a meritorious student in the year 2015.
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❖ CO-CURRICULAR ACTIVITIES

- Organized seminars on how to use MATLAB to generate and simulate HDL codes for FPGA.
- Presented the Camera Controlled Armed Robot and discussed future scopes in robotics at IIT, Kanpur.
- As a National Service Scheme (NSS) Coordinator of the university for the year 2016-2017, organized several social events like rally 'Swachh Bharat Abhiyan' on the occasion of Gandhi Jayanti in the year 2016 and Tree plantation on the large scale.

Date: 08/02/2020

Pranav Sharma