

Harsh Mittal

Interested in the field of Embedded systems, IoT and Machine Learning.
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EDUCATION

LNM IIT

BTECH. IN ELECTRONICS AND COMMUNICATION
 July 2020 | Jaipur, Rajasthan
 CGPA: 7.70/10.0

ST. XAVIER SR. SEC. SCHOOL

Passout: May 2016 | Jaipur, Rajasthan
 Percentage: 89.8/100.0

LINKS

Github:// [harshmittal2210](#)
 LinkedIn:// [harshmittal2210](#)
 Medium:// [harshmittal2210](#)

COURSEWORK

UNDERGRADUATE

Basic Electronics + Practicum
 Micro-controller and Interface + Practicum
 Computer Programming + Practicum

CO-CURRICULAR

TEACHING ASSISTANT

ELECTRONICS LAB
 Aug 2018 – Dec 2018 | LNM IIT, Jaipur
DATA STRUCTURE AND ALGORITHMS LAB
 Jan 2019 – May 2019 | LNM IIT, Jaipur
MICRO-CONTROLLER AND INTERFACE LAB
 Aug 2019 – Dec 2019 | LNM IIT, Jaipur

SKILLS

PROGRAMMING

Intermediate:
 Python • Matlab • \LaTeX • C++ • C

BOARDS

Cube Orange • Arduino Mega • Zybo Board • Atmega 16 • Raspberry Pi • Tiva TM4C123G • Pynq Z1 • NodeMCU

SOFTWARES

Mission Planner • Matlab • Keil • Arduino IDE • Vivado • QT • Vivado HLS • CodeVision AVR • SinaProg

PUBLICATIONS

IEEE GCCE 2019

Oct 2019 | Osaka, Japan

- Paper on "FPGA Implementation of Handwritten Number Recognition Using Artificial Neural Network" published.

EXPERIENCE

ASTERIA AEROSPACE | EMBEDDED SOFTWARE ENGINEER

July 2020- Present | Bangalore, Karnataka

Working on creating advance capabilities drone with onboard AI computation.

- Developing complete 360 degree awareness around drone using SLAM along with obstacle avoidance.
- Precision Landing using computer vision.

CRON SYSTEMS | EMBEDDED SYSTEMS INTERN

Jan 2020- July 202 | Gurugram, Haryana

- Created an application to visualize point cloud of different LiDAR and have written algorithm to detect intrusion using raw data.
- Working on middleware which acts as an intermediate layer between the hardware(SoCs FPGA Boards, Embedded devices, LiDARs, cameras and different sensors) and front-end software.

UNIVERSITI PUTRA MALAYSIA | RESEARCH INTERN

May 2019 – July 2019 | Seri Kembangan, Malaysia

- Project on Home automation and security using Deep Learning and MQTT using edge computation.
- Faculty Mentor: Prof.(Dr.) Thinagaran Perumal

TALKS

PYCON INDIA 2020

Online, 2-3 Oct 2020

Title: Building an Home Automation system using PyQt, MQTT and Arduino. Link: https://www.youtube.com/watch?v=OzTF9Yi_igg

KEY PROJECTS

64 QAM IMAGE TRANSMISSION THROUGH WIRED/WIRELESS CHANNEL

March 2019 – April 2019

Verified the algorithm over MATLAB and implemented over Zed-board in C++.

MALE FEMALE VOICE RECOGNITION

Oct 2018 – Nov 2018

DSP project for recognizing voice of different gender. Created a GUI application for the same on MATLAB.

MARTIAN ROBOT

Jan 2018 – Feb 2018

All-terrain robot equipped with wireless camera, obstacle remover, Atmega 16 micro-controller, HC-05 Bluetooth module for controlling the robot.

POSITION OF RESPONSIBILITIES

2017- 2018	Co-ordinator	Imagination(Photography and Videography Club)
2017- 2018	Core Member	LNMIIT Centre for Robotics and AI