

EDUCATION

University of Delhi, New Delhi	(Aug 2015 - July 2019)
Netaji Subhas Institute of Technology (NSIT),	CGPA: 8.525
B.E., Electronics and Communication Engineering	Percentage: 77.75%

CERTIFICATES

- > UC San Diego Data Structures and Algorithms Specialization (In Progress) (Course: Algorithmic Toolbox [[CERT](#)])
- > Xilinx Certified Training Program on "Static Timing Analysis & Embedded Systems Design".

SKILL SET

Programming: C++, Java, Python, Bash, Assembly, SQL, MATLAB, LATEX.
Design: Embedded on Xilinx SoC (Verilog, VHDL, C++), Digital & Analog Circuits

WORK EXPERIENCE

Research Engineer (July 2019 - Present) **Centre for Development of Telematics (C-DOT), Govt. of India**
Developing a real-time 200G regenerator system for processing OTU 4 (Optical transport unit) frame overheads. Tasks: Circuit Design and Writing Software for SoC (Processor + FPGA).

Software R&D Intern (Dec 2018 - Feb 2019) **Mentor Graphics Noida, Uttar Pradesh, India**
Developed a signal & exit handler, annotation infrastructure for software messages and file/data encryption infrastructure in C++ for Symphony, Mentor Graphics' latest High-Performance Mixed-Signal Platform.

Project Trainee, Internship (May - July 2018) **Texas Instruments Inc. Bangalore, Karnataka, India**
Theoretical & Experimental Analysis of Class-D (LSR) Output Filtering Circuitry: In Low Power Audio Amplifiers Team of TI on a research project for performance benchmarking of the audio amplifier ICs.

ACADEMIC PROJECTS

Open Source Scientific Instrumentation: Undergrad B.E. Project. **Feb - May 2019**
PCR Thermocycler: IOT Biochemical Reaction Multimeter:
1. Nichrome for Heating & Peltier for both Heating & Cooling 1. pH meter with auto calibration
2. 500W Halogen Lamp for Heating & DC Fan for Cooling 2. Wireless reaction temperature meter

Mathematical Alarm Clock: [[GIT](#)] **Jan - May 2018**
Designed an 8085 microprocessor based Alarm clock which prompts a mathematical question to shut off the alarm.

Talkative Tom - Hardware & Embedded Software Implementation: [[VIDEO](#)] [[DOC](#)] [[GIT](#)] **Aug 2016 - Jul 2017**
Design, fabrication and testing of an audio storing & playback device with pitch modification using MSP-430 TI-microcontroller / Atmega328P microcontroller, SPI Serial Flash for Storage & class-D amplifier for speaker

LEADERSHIP & VOLUNTEER EXPERIENCE, TALKS

General Secretary **Junoon The Photography Club of NSIT, New Delhi, India** **Jan 2016 - May 2019**
Leading and managing event covering teams every year for NSIT's cultural fest, organising online photography competitions, workshops, finding sponsors, networking with people and other photographers.

Instructor & Mentor **Tinkering Workshop for Army Goodwill Schools at IIT Jammu, India** **Jan 2018**
Workshop for J&K children studying in Army goodwill schools. Demonstrated simple physics experiments and projects from our lab to stimulate young engineer in them.

Instructor & Mentor **Arduinodaya Workshop, CEDT NSIT, New Delhi, India** **Jan 2018**
Workshop on Embedded Systems design, electronics design, efficient software development (parallel programming), communication protocols etc. using the pedagogy project board Arduinodaya.

Instructor & Mentor **TI-CEPD Internship Program** **June - Aug 2017**
This was an annually conducted internship program by the TI-CEPD lab of NSIT in coordination with CEDT NSIT. I mentored in 2 of these programs. 1 month in NSIT and 1 month in Chitkara University, Himachal Pradesh, India

INTERESTS AND HOBBIES

Nature, Portrait and Food Photography [[LINK](#)]: I go on photography trips including trekking in mountains & visiting bird sanctuaries. I have also done several food photography projects.

Cooking: I keep on exploring new dishes and have perfected my own recipes for Pizza, Lasagne, Cream Tomato Pasta, and many more.