

**EDUCATION**

<b>University of Delhi, New Delhi</b>	(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**

**Low Cost Pedagogy Scientific Instruments.** **(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](#)] [[VIDEO](#)]** **(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.