

## EDUCATION

2018 - Present	<b>Indian Institute of Technology Kanpur</b> , B.Tech. in Electrical Engineering, CPI : 7.8/10
2016 - 17	The New Green Field Public Academy ,Indore, Class XII, Percentage : 84.2%
2014 - 15	Delhi Public School,Indore Class X, CGPA : 10/10

## SKILL-SETS

<b>Programming Language</b>	C/C++, Python, Verilog
<b>Tools and Softwares</b>	MATLAB, LABView, Autodesk Inventor, GNU-Octave, Git, $\text{\LaTeX}$
<b>Hardware</b>	Arduino, Raspberry Pi, Xilinx FPGAs, IMU, WiFi Module (ESP-8266)

## EXPERIENCE

May 2019 Jul. 2019	<b>Wi-TRACK</b> , ELECTRONICS CLUB, IIT KANPUR Summer Project, : <ul style="list-style-type: none"> <li>➤ <b>Implemented a Frequency Modulated Carrier Wave RADAR</b> capable of tracking human beings over a distance of 3m in presence of a solid obstacle between the walking human and the antenna pair.</li> <li>➤ Developed hardware subsystem consisting of a sweep generator, signal generator, frequency mixer and oscilloscope, and integrated it with the software stack using serial protocol for data logging (PyVISA).</li> <li>➤ <b>Won the best Research &amp; Development Project award</b> in the Science &amp; Technology Council.</li> </ul> <div>Signal Processing Software-Defined Radio (NI-USRP) LABView</div>
May 2019 Jun. 2019	<b>Electromania</b> , IIT KANPUR Takneek 2018, <i>Inter-Hostel Competition</i> : SCIENCE & TECHNOLOGY COUNCIL <ul style="list-style-type: none"> <li>➤ Designed a bare-metal gimbal system by <b>estimating the real-time orientation by Inertial Measurement Unit</b>(IMU - MPU6050) &amp; remotely measured the error in real-time using lasers diode and WiFi module.</li> <li>➤ <b>Extracted noise-free waveform of heartbeat pulses</b> of a human using Near-Infrared Spectroscopy through infrared sensor and error rectifying components like low-pass filters, DC-bias remover.</li> </ul> <div>Digital Circuit Designing IoT Arduino ESP-8266 Wifi Module MPU6050 (IMU) Non-programmable ICs</div>

## RELEVANT COURSE WORK

Signals, Systems and Networks	Hardware description languages for FPGA design**	Fundamentals Of Computing
Control Systems*	Introduction to Electronics	Partial Differential Equation
Microelectronics*	Introduction to Electrical Engineering	Linear Algebra and Differential Equation

\*Ongoing \*\*Audited

## POSITION OF RESPONSIBILITY

May 2019 Present	<b>Secretary</b> , Electronics Club, <i>IIT Kanpur</i> : <ul style="list-style-type: none"> <li>➤ <b>Promoted Electronics as a hobby in IIT kanpur</b> campus community through a variety of workshops, hackathons, and lectures.</li> <li>➤ Improved participation and mentored juniors in SnT competitions like Techkriti and Takneek.</li> </ul>
May 2019 Present	<b>Student Guide</b> , Counselling Service, <i>IIT Kanpur</i> : <ul style="list-style-type: none"> <li>➤ <b>Nurtured a group of fresher students</b> from different majors in both their academics and campus life for their smooth transition into college life.</li> <li>➤ Volunteered in conduction of 10-day Orientation Program for freshers to familiarise them with IITK.</li> </ul>

## EXTRACURRICULAR ACTIVITY

- Participated in State-level Volleyball Championship representing Indore District.
- **Won 1<sup>st</sup> prize in Street Photography Competition** in Inter-IIT Cultural Meet 4.0.

## AWARDS AND ACHIEVEMENTS

- Secured All Indian Rank(AIR) 1671 among 0.5 million students in JEE Advance 2018.
- Secured **All Indian Rank(AIR) 876** among 1.5 million students in JEE Main 2018.