

Education

- June 2019 **Bachelors of Technology (B. Tech.)**, *Indian Institute of Technology (IIT Kanpur)* .
Major: Electrical Eng. **GPA = 9.5/10**; Minor: Industrial and Management Eng.
- May 2015 **Shanti International School**, *Una, Himachal Pradesh, India* .
Central Board of Secondary Education, Class XII, Percentage: **94.4%**
- May 2013 **BBMB DAV Public School**, *Hoshiarpur, Punjab, India* .
Central Board of Secondary Education, Class X, CGPA: **10.0**

Research Internships

- May-July 2018 **NYU Tandon School of Engineering**, *Brooklyn, NY, USA*.
Capacity Analysis of 5G Systems | Mentor: Prof. Shivendra Panwar
- Studied the principle of mm-Wave and designed a model based on Random Way Point Mobility
 - Incorporated 3 major factors affecting the capacity, namely Path loss, Shadowing for NLoS and LoS and Handoffs in Matlab
 - Structured the model to involve Dynamic as well as Self Blockage with suitable handoff delays
 - Analyzed the effect of Blocker and Base Station Density for key domains vs Frequency of Handoffs and Average Power Received
- May-July 2017 **Indian Institute of Technology**, *Kanpur, UP, India*.
Peer to Peer VoIP/Messaging | Mentor: Dr. Y.N. Singh
- Theorized and realized a peer-to-peer based messaging algorithm in Java using Eclipse
 - Built a framework where any two or more users can chat online and offline, employing user cloud for storage of messages
 - Employed asymmetric (RSA) and symmetric (AES) cryptography algorithm for ciphering of the messages to be sent or received

Undergrad Project

- May-July 2016 **Indian Institute of Technology**, *Kanpur, UP, India*.
Kinect Hands Free | Mentor: Prof. Soumya Ranjan Sahoo
- Devised speech and gesture recognition to control input in the computer using the MS Kinect
 - Mapped all keyboard keys to hand actions and verbal guidelines, also enabled the mouse control by right-hand gesticulation
 - Exerted hand waving gesture for transition of slides and to highlight something in Power Point Presentation

Course Projects

- Jan-April 2019 **Indian Institute of Technology**, *Kanpur, UP, India*.
Wideband Omnidirectional Antenna | Mentor: Prof. K.V. Srivastava
- Simulated and designed an antenna for 4G LTE applications
 - Antenna yielded a peak gain in the range of 3.6-4.2 dBi throughout the entire operational bandwidth with an average radiation efficiency of 83%
- Jan-April 2018 **Indian Institute of Technology**, *Kanpur, UP, India*.
Heart Beat Sensor | Mentor: Prof. Baquer Mazhari
- Designed a low cost heart beat sensor using op-amps and basic electronic components

Awards and Achievements

- 2018 Research & Study scholarship awarded by New York University
- 2017 Received Summer Undergraduate Research Excellence Scholarship (SURGE) at IIT Kanpur
- 2016-2018 Conferred with Academic Excellence Awards, awarded to top 7% students at IIT Kanpur
- 2016-2018 Received A/A* grade in all the Electrical Engineering Courses
- 2016 Awarded a cash prize of 75,000 INR under Mukhya Mantri Yojna by Govt. of India
- 2015-2016 Credited A* grade in Real Analysis, Linear Algebra; achieved 99.99th percentile

Positions of Responsibility

2017-2018 **Indian Institute of Technology, Kanpur, UP, India.**

Core Team Operations | Institute Counselling Service

- Led a team of 250 volunteers for providing academic, financial, and emotional support to students
- Co-led a team of 136 student guides and coordinated with numerous faculty members for the smooth conduction of 6-day long Orientation Program for 830 freshmen at IIT Kanpur
- Conceptualized and conducted 7+ weekly sessions aimed at strengthening teamwork
- Conducted Personality Enhancement Classes to help 40+ students develop communication skills, openness to new things, and to build self-confidence and pro activeness inter personally
- Guided and supported 3 freshmen academically and emotionally in their first year at IIT Kanpur
- Helped students with the course 'Calculus' and 'Linear Algebra' by Institute level classes

Work Experience

June **Deutsche CIB, Mumbai, India.**

2019-Present **Financial Analyst**

- Undertook credit analysis of counterparties by identifying business and financial risk based on understanding of business model and preparing cash flow model/ forecast and peer analysis
- Participated in Live trades with onshore credit officers by understanding the trade dynamics, providing recommendation and completing the credit write-ups for the same
- On-going monitoring & surveillance of assigned international portfolios, including rating changes, market/industry developments, news events; keeping DB's exposure in mind

Technical Skills

Programming C, JAVA, MATLAB, GNU OCTAVE

Software MICROCAP, AUTOCAD, MPLAB IDE, SIMULINK (MATLAB), ECLIPSE, NETBEANS, MICROSOFT VISUAL STUDIO

Operating Systems WINDOWS, MAC OS HIGH SIERRA, FEDORA

Coursework

Electrical Engineering Mathematical Structures of Signals & Systems | Advanced RF Antennas | Antenna Analysis & Synthesis | Information Theory | Communication Systems | Digital Signal Processing | Principles of Communications | Signals, Systems & Networks | Stochastic Processes | Digital Electronics | Electromagnetic Theory

Mathematics Game Theory | Matrix Theory & Linear Estimation | Probability and Statistics | Linear Algebra and Differential Equations (Mathematics-II) | Multi-Variable Calculus (Mathematics-I) | Partial Differential Equations | Complex Variables