



**Vidushi Gupta**  
M.Tech.  
Electrical Engineering  
Indian Institute of Technology Dhanbad

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Examination	University	Institute	Year	CPI / %
Post Graduation	IIT Dhanbad	IIT Dhanbad	2019	7.83
<b>Masters Specialization: Power Systems</b>				
Graduation	Panjab University	UIET Chandigarh	2016	76.2
<b>Undergraduate Specialization: Electrical and Electronics Engineering</b>				
High School	CBSE	DAV Senior Secondary School Chandigarh	2012	87.8
Secondary School	ICSE	St. Stephens School Chandigarh	2010	86

## CERTIFICATIONS

- Passing Certificate with **96%** in **Problem solving through programming in C (certificate link)** conducted by **IIT - Kharagpur** in collaboration with NPTEL, IIT Madras and AICTE, New Delhi.  
(Instructors: Prof. Anupam Basu) (Jan 2020 - Apr 2020)
- Passing Certificate with **96%** in **An introduction to programming through C++ (certificate link)** conducted by **IIT - Bombay** in collaboration with NPTEL, IIT Madras and AICTE, New Delhi.  
(Instructors: Prof. Abhiram G. Ranade) (Jan 2020 - Apr 2020)
- Elite Certificate and Faculty Development Program Certificate with **71%** in **Introduction to Smart Grid (certificate link)** conducted by **IIT - Roorkee** in collaboration with NPTEL, IIT Madras and AICTE, New Delhi.  
(Instructors: Prof. Narayana Prasad Padhy, Prof. Prem Lata Jena) (July 2019 - Sep 2019)
- Elite Certificate and Faculty Development Program Certificate with **68%** in **DC Microgrid (certificate link)** conducted by **IIT - Roorkee** in collaboration with NPTEL, IIT Madras and AICTE, New Delhi.  
(Instructors: Prof. Avik Bhattacharya) (July 2019 - Sep 2019)

## WORK EXPERIENCE

- **Rayat Group of Institutions**  
Assistant Professor (July 2019 - Jan 2020)
  - Taught **Power System Analysis (Sem 7)**, **Power Electronics (Sem 5)**, **Electrical Circuit Analysis (Sem 3)**, **Basics of Electrical Engineering (Sem 1)**
  - SPOC for NPTEL Swayam and class in-charge for Sem 3.

## PUBLICATIONS

- **International Conference**
  - Vipin Kumar, Vidushi Gupta, Gauri Shankar, Harry Garg - Simualtion of efficient thermal management techniques for miniaturized circuits and systems, IEEE conference (Madras section), ViTECoN, March 2019
- **National Conference**
  - Kamalpreet Kaur, Tanvi Thakur, Vidushi Gupta, Dipanshu Sehjal, Vipin Kumar - Electromagnetic Interference and its counter measures for Pilot Display System (PDS): A case study, IETE, Sector 30 Chandigarh, April 2016

## ACHIEVEMENTS & ACTIVITIES

- Maximum star gold badge achieved in **Problem Solving and SQL** on **HackerRank (profile link)**.
- 230+ problems solved on **LeetCode (profile link)** hosted **here on GitHub**.
- **All India Rank - 2443** out of **1,17,443** in GATE 2017 Electrical with a percentile of **97.91**
- Qualified GATE Electrical **2016, 2017, 2018** and **2019**
- **Director** of Club services of ROTARACT UIET '14
- **Ranked 2nd** in Senior (WOMEN) Chandigarh Handball Championship in March 2012
- Participated in 40th Senior (WOMEN) **National** Handball Championship, Delhi in 2012

## TECHNICAL SKILLS

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- **Languages:** C, C++, Python, SQL
- **Softwares:** MATLAB, Comsol, KEIL, Git
- **Hardware:** 8085 Microprocessor, 8051 Microcontroller
- **Familiar with:** Data Structures and Algorithms, Database Management Systems, Operating Systems, Low level design, Computer networks

## INTERNSHIPS

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- 1 year Research internship in **CSIR-CSIO, Chandigarh** (2018-2019)
- 6 months Research internship in **CSIR-CSIO, Chandigarh** (2016)
- 6 weeks Industrial training in **Bharat Electronics Limited (BEL) Panchkula** (2015)
- 4 weeks Industrial hands on training at **Design Simplified (UIET) Chandigarh** (2014)

## PROJECTS

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- **Parking Lot Management System (Repo Link)**  
Self
  - Backend: Complete with **RESTful APIs** written in **Flask (Python3)** tested using Postman, **SQLite** as DB and support for different user logins using **Flask blueprints**.
  - **Frontend:** Working towards developing with **HTML/CSS/JS**.
- **Electromagnetic Interference in Ferrofluid based cooling techniques for electronic system**  
(M.Tech. Thesis, Principal Scientist Vipin Kumar (CSIO-CSIR) and Dr. Gauri Shankar (IIT Dhanbad)) (2018-2019)
  - Objective I:
    - \* To check the effect of various coolants when passed through a power card emitting high heat energy. Fluids under analysis are air, water and ferrofluid.
    - \* Designing of fins for convective cooling.
  - Objective II:
    - \* Electromagnetic interference caused due to permanent magnet and ferrofluid used as a coolant.
  - Objective III:
    - \* Changes in magnetic strength of permanent magnet and electromagnetic countermeasures to reduce electromagnetic interference to work in safe operating area.
- **Electromagnetic Interference and its Counter Measures for Pilot Display System**  
(B.Tech. Major Project, Principal Scientist Vipin Kumar) (2016)
  - Studied and Analyzed the Electromagnetic Interference due to circuit components on the Pilot Display System of Fighter Aircrafts.
  - After experimenting with various electromagnetic compensation measures and analyzing on CRO, shielding and grounding of power amplifier card on the circuit of pilot display system proved effective.
- **Room Automation**  
(B.Tech. Minor Project, Mrs. Parul Gaur) (2015-2016)
  - Automatic room light control system using lasers - LDR pair and 8051 microprocessor.
  - Performs the task of controlling room lights and counting the number of visitors which is displayed on a LCD.
  - When the first person enters the room, the lights are switched on and when the last one leaves the lights are switched off. The counter is maintained simultaneously.
  - Implemented in one of the lecture halls of U.I.E.T., Panjab University, Chandigarh.
- **Wireless Microphone System**  
(Wireless Communication, Mr. Gaurav Sapra) (2014-2015)
  - The MIC converts the voice signals spoken close to it into electric pulses.
  - Transistor works as an audio amplifier and amplifies the electric pulses at collector arm.
  - Carrier waves are ridden by audio signals constituting the transmission of audio in air.
  - Transmitted waves can be received over any standard FM radio receiver.
- **Electronic Dice**  
(Exploratory Project) (2013-2014)