

# SNEHA SHARMA

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## Career Objective:

**To gain a challenging role that will offer the best opportunity for further development of my abilities, technical skills and knowledge in an established firm with long-term career growth possibilities.**

## Work Experience:

- Registered Indian Patent Agent- 4535. Excellent knowledge and interpretation of Indian Patent Act and Rules, PCT process, Patent Searching and Drafting. Drafting Skills and prior art search in domains of Electronics, Electrical, Computer Science, and Mechanical Engineering.
- Working as R&D Engineer Freelancer from Sept 2015 to present. Work Profile includes making project codes for different microcontrollers like 8051, AVR, ARM, and Arduino interfacing with GSM, GPS, Wifi, RFID and different modules and sensors, Simulink models for Electric Vehicles, Hybrid Energy Storage System, Power Electronics. The role also includes technical writing for new inventions and guidance in writing research papers, and drawing tools.
- Worked as Technology Evangelist (Faculty) in Appin Technology Lab, GTB Nagar, Delhi. From June 2014 to Aug 2015.

Taking training sessions for - Embedded Systems and Robotics

(8051, AVR, ARDUINO, ARM microcontrollers)

- VLSI (PSPICE, HSPICE)

- Worked as a trainee (web support engineer) in Sony India Pvt. Ltd for 5 months in 2012(May to October).
  - Handling queries for troubleshooting Sony Electronic Products (Laptops, Digital Camera, TV, etc)

## Academic Qualification:

- PhD Scholar(part-time) in Electronics and Communication from Lovely Professional University, Punjab (pre- submission stage).

- M.Tech (Electronics and Communication with specialization in VLSI Design and Embedded Systems) from Manav Rachna International University (MRIU), Faridabad, Haryana with 70% in 2015.
- B. Tech (Electronics and Communication) with 63.57% from Rajasthan Technical University, Kota in 2012.
- 12<sup>th</sup> from Springdales School, New Delhi (C.B.S.E.) in 2007 with 74.20%.
- 10<sup>th</sup> from Springdales School, New Delhi (C.B.S.E.) in 2005 with 76.00%.

### **Training:**

- Short-term certificate course in Patent Drafting
- Certificate course in VLSI tools in 2022
- 6 months Certificate Course on Embedded Robotics from Pune University in 2012-13.
- ONE MONTH OF INDUSTRIAL TRAINING from MTNL, NEW DELHI on GSM (Academic Training).
- Workshop on ROBOTICS from Orion Enterprises held in college.
- Workshop on Analog Electronics from South Delhi Computer Centre, Delhi.

### **Technical Skills and Tool Profile:**

- Embedded System, Microcontrollers (ARM 7 LPC2148/38, 8051, AVR), Keil µvision4, Proteus (ISIS), Arduino, AVR studio, CodeVision AVR, RTOS, Drones, GPS, GSM,
- Electric Vehicle, Solar-based Hybrid Electric Vehicles
- Languages- C, Embedded C, Python, Java, Arduino, MATLAB, Simulink
- Operating System – Linux and Windows.
- SPICE (PSPICE, Tanner & HSPICE) Simulation Software
- Machine Learning, Artificial Intelligence, Deep Learning, the basic idea of all latest technologies
- Excellent verbal and written skill

### **Projects: -**

- IOT health monitoring system with Machine Learning.
- RFID card detector-based systems access control with AI Security
- Home automation system- using ATMEGA16, Zigbee and android app
- RTC temperature logger
- Hybrid electric vehicle wireless charging simulation
- Bluetooth & Zigbee controlled food ordering system
- pick and place mechanical robot
- smart field system using sensors and Zigbee
- patient monitoring system using Zigbee
- GSM-based home security system
- Vehicle number recognition system using MATLAB
- Anti-theft GSM and GPS-based tracking system for vehicle
- FINFET and GNRFET Nanotechnology-based logic gates and flip-flops

- Truth Discovery and Sentiment analysis in big data using ML
- LIFI based Audio video and Data transfer underwater

### **Academic Projects:**

#### **PhD (Pursuing)**

- Optimization of Leakage Current and Power in Digital Logic and Arithmetic Circuits using FinFET and GNRFET Technology

#### **M.Tech Research Project:**

- Low power and Noise tolerant dynamic logic circuit design using FINFET's (32nm technology)

#### **B. Tech:**

- "Object Counter" as a minor project
- "Access Control System" as a major project

### **List of Publications:**

1. Sneha Arora, Suman Lata Tripathi, "High Performance Mixed Logic Decoders using MOS like GNRFET in 22nm Technology", SCIE, International Conference on Advancements in Computing, Communication and Technology (ICACCT-2022)
2. ANKIT AGGARWAL, SNEHA ARORA, "IOT-based Privacy Preserving Machine Learning Algorithm for High-Speed Encryption" ICAPIE-DTU 2022, SCIE Indexed
3. Sharma, Ashish & Dutta, Umesh & Arora, Sneha & Sharma, Vipin. (2016). Design & Optimization of CNTFET based Domino 1-Bit ALU. 10.17148/IJARCCCE.2016.5531.
4. Akshay Angaria, Umesh Dutta, Sneha Arora, "DESIGN & OPTIMIZATION OF FINFET BASED DOMINO LOGIC CIRCUIT"international Journal of Technical Research and Applications e-ISSN: 2320-8163,www.ijtra.com Volume 4, Issue 4 (July-Aug, 2016), PP. 19-26
5. Sneha Arora, Umesh Dutta, Vipin Kumar Sharma, "A Noise Tolerant and Low Power Dynamic Logic Circuit Using Finfet Technology"Vol. 5 - Issue 12 (December - 2015), International Journal of Engineering Research and Applications (IJERA) , ISSN: 2248-9622 , www.ijera.com
6. Vipin Kumar Sharma, Umesh Dutta, Sneha Arora, R.P. Sharma, "Ground Bounce Noise Reduction in Vlsi Circuits"Vol. 5 - Issue 12 (December - 2015), International Journal of Engineering Research and Applications (IJERA) , ISSN: 2248-9622 , [www.ijera.com](http://www.ijera.com)

### **Extra-Curricular Activities:**

- Organized various cultural programs in school and college.
- Participated in annual day functions as an anchor.

### **Strengths:**

- Determined to learn with a practical approach.
- Ability to work in a challenging environment.
- Enthusiastic and can produce results under deadline constraints.
- Excellent communication and presentation skills.
- Hardworking.

**Personal Information:**

- Date of Birth: 25-Oct-1989
  - Name (as per education certificates): Sneha Arora
  - Gender: Female
  - Marital Status: Married
  - Husband's Name: Mr Vipin Kumar Sharma
  - Father's Name: Mr. Anil Arora
  - Permanent Address: RZ-C-82, Dabri Extn East, New Delhi-45
  - Languages known: English, Hindi, and Punjabi
  - Hobbies: Research, Travelling
  - Passport: Yes
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**(SNEHA SHARMA)**

**Date:**

**Place:**