

## Profile

A curious, polyglot and polymath who like to learn and solve problem irrespective of field. Notable contribution in research field with mostly novel ideas, that are usually out of box. Learning about new technologies, brain storming on ideas and reading books is everyday job & hobby.

## Internship and Industry Experience

<b>Matrix Geo (Intern)</b>	2020
Research and development on LiDAR and IMU for 3D Mapping	
<b>OYO Full Stack Web Developer (Freelancing)</b>	2019
Development of SAAS using MEAN Stack for sales team, to make sales easy by providing search and dynamic calculation of different itinerary.	
<b>IntelliTicks Full Stack Web Developer (Intern)</b>	2019
My day to day task consists of product development and feature addition. Fixing bugs and managing code base of existing features.	
<b>Centre of Artificial Intelligence and Robotics (Project Intern)</b>	2018
Our task was to develop automated path and its navigation without human pilot drone navigation system.	
<b>FabHotels (Intern)</b>	2017
Video Editing and Advertisement designing	
<b>Tirupati Medicos (Freelancing)</b>	2017
Designed a inventory management and POS system on java and SQL. So multiple shops can share same inventory and information about medicines.	

## Achievements and Award

## Research Publications

• Hack BMU <b>First Position</b>	2019	Vanita Jain, Gopal Chaudhary, <b>Nalin Luthra</b> , Akshit Rao, Shlok Walia "Dynamic Handwritten Signature and Machine Learning Based Identification verification for keyless Cryptocurrency Transactions", ICDSSA 2019 Special Issue : Journal of Information and Optimization Sciences (JIOS), <a href="#">Taylor and Francis</a>
• <b>Brainwaves Societe Generale 6th Position</b>	2019	
• Smart India Hackathon, Grand Final Finalist (Bhopal)	2018	
• Technoxian - WRC (World Robotic Championship), <b>3rd Position</b> across 300 teams and <b>20 Countries</b> , Sponsored by Govt. of India, <b>Ministry of Science and Technology</b> , RoboRace	2017	Vanita Jain, Gopal Chaudhary, <b>Nalin Luthra</b> , Akshit Rao, Harman Singh "How to help Johnny travel in Brimming train ?" ICDSSA 2019, Lecture Notes in Electrical Engineering ( <a href="#">Springer book series</a> )
• <b>Delhi Technical University</b> , LFR 2nd Position	2017	<b>Nalin Luthra</b> , Vanita jain, Gopal Chaudhary "Temperature invariant and high precision absolute rotary encoder using photocells on visible light spectrum" (Under Review)
• <b>Delhi Times</b> Fresh Face college Winner.	2016	<b>Nalin Luthra</b> , Vanita Jain "Medical Assistance using drone for remote areas"

## Technical Skills

- **Languages/Databases :- C/C++, Python**, Java, Processing, MATLAB, SQL, **JavaScript**, HTML, CSS, MongoDB and URDF
- **Frameworks/Tools :- NodeJs**, **ROS** (Robotics Operating System), **Angular**, RVIZ, **Meteor**, **OpenCV**, Gazebo and Unreal Engine
- **Hardware :- Arduino**, **Raspberry pi**, **ESP8266** and 8085 Microprocessor
- **Technologies :- Computer Vision**, **IOT**, **Machine Learning**, **Drones**, **Robotics**, **Web Technologies** and **Cyber Security**.

## Education

<b>College - BVCOE ( IPU)</b>	IT	2016-Present
<b>The Air Force School Class 12th</b>	PCMB with Computer Science <b>94.5%</b>	2016
<b>The Air Force School Class 10th</b>	<b>9.0 CGPA</b>	2014

## Positions and Leadership Experience

• <b>Chairperson (Indian Society of Technical Education)</b>	2019-Present
• <b>Head of Technical Affairs</b> (Indian Society of technical education BVP)	2018-2019
• Taken a session on Robotics at DTU under ROSPi-Jam	2018
• <b>Head of Robotic Society</b> Electronika (BVP-ISTE)	2017-2018
• <b>Leading team of 25 Students</b> to Build Home Automation and Self Driving car	2017-2018
• Publicity Head (ACM-BVP)	2017-2018
• Teaching Robotics to Students (1st - 4th Year)	2017-2018
• Teaching Programming to Students (1st - Year)	2017-2018
• Event manager (BVP-ISTE)	2016-2017
• Graphic Designer Executive (ACM-BVP)	2016-2017
• Event manager Executive (TEDxBVP)	2016-2017
• Head Co-curricular The Air Force School	2014-2016

## Miscellaneous

**Google Local guide** : Level 7 Contributor

## Technical Projects

• <b>Portable PHP server on Raspberry Pi</b>	2020
• <b>Non Invasive electricity monitoring system with prediction</b> for budget planning	2019-2020
• <b>PacBot ( Indoor Navigation and Visualising physical world using ROS )</b>	2018
• <b>Indoor navigation</b>	2018
• <b>Self Driving Car</b> using computer vision and ultrasonic sensors	2017-Present
• <b>Home Automation</b> using Raspberry pi and IOT sensors with firebase and NodeJs	2017-2018
• <b>Eye - Blinking Detection</b> for <b>Security</b> and <b>Surveillance</b>	2017-2018
• <b>Farming Drone</b> to prevent snakes and other animals enter in the farm land	2018
• Raspberry Pi - 3 based personal Cloud Storage	2018
• <b>CNC - Machine</b> using waste	2017
• Air-Piano	2017
• Drone (Using KK2 flight Controller)	2017
• <b>Laptop Controlled Car</b> using <b>ZigBee</b> Communication and <b>self made software using Processing ( JAVA )</b> . Working radius 1.2 Km.	2017
• <b>Self Balancing Bot</b>	2017
• Line Following Robot ( Using <b>PID</b> and <b>LDR</b> )	2017

## Hobbies

• Chess	• ICE Skating	• Rapping (Hip-Hop)
• Reading books	• Photography	• Running
• Novels	• Motivational Speaker	• Online gaming
• Swimming	• Painting	

## References

1. **Prof. Dr. Vanita Jain, (Dean of Academics)** Vice-Principal, Bharati Vidhyapeeth College of Engineering, New Delhi
2. **Deepika Thapar Singh, CEO-Principal** Credence High School Dubai (**Ex-Principal The Air Force School**)