## Nakul Garg

Interests

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Information Peeragarhi e-mail id : nakulgarg.2208@gmail.com

New Delhi, 110087 git : https://github.com/Nakul22

INDIA website: https://sites.google.com/view/nakulgarg/

Research Robotics, Image Processing, Internet of Things, Visible Light Communication

EDUCATION B.V.C.O.E., New Delhi, India Jul. 2014–May 2018

B.Tech. in Electronics and Communication Engineering, 70%

S.M.S., New Delhi, India

12<sup>th</sup> C.B.S.E, *CBSE 90%*Jul. 2014
10<sup>th</sup> C.B.S.E, *CBSE 82%*Jul. 2012

Internships and Research Assistant Sept. 2018—Present

Industry IIT Delhi

EXPERIENCE Advised by :, Dr. Rijushekha Sen (IIT Delhi) and Dr. Siddharth Joshi (Notre Dame)

Technical Advisor May. 2018—Sept. 2018

Celestini Project India, Marconi Society, Google, IIT Delhi

Led by :, Dr. Aakanksha Chowdhery (Google AI) and Dr. Brejesh Lall (IIT Delhi)

Project Intern

Jun. 2017—Sept. 2017

Celestini Project India, Marconi Society, Google, IIT Delhi

Led by :, Dr. Aakanksha Chowdhery (Google AI) and Dr. Brejesh Lall (IIT Delhi)

Technical Executive Aug. 2016—Jul. 2017

Prismart Productions, New Delhi

Trainee Aug. 2016—Sept. 2016

Internet of Things, Texas Instruments, India

Trainee Sept. 2015—May 2016

Embedded Systems, IQB Solutions, Delhi

RESEARCH
PUBLICATIONS
AND PATENTS

- N. Garg, I. Janveja, D. Malhotra, C. Chawla, P. Gupta, H. Bansal, A. Chowdhery, P. Mukherjee, and Brejesh Lall, "DRIZY- An IOT based Driver Assistance System," submitted to ACM/IEEE International Conference on Internet-of-Things Design and Implementation 2018.
- N. Garg, I. Janveja, D. Malhotra, C. Chawla, P. Gupta, H. Bansal, A. Chowdhery, P. Mukherjee, and Brejesh Lall. "DRIZY—Collaborative Driver Assistance Over Wireless Networks," ACM MobiCom Poster, Utah, USA, 2017.
- 3. N. Garg, J.Parikh. "Wireless transceiver design for visible light communication," ICICI, India, 2017.
- 4. I. Janveja, **N. Garg**, C. Chawla, J.Parikh. "Aquacomm: Underwater Visible Light Communication," IndiaCom, India, 2018. (accepted)
- 5. **N. Garg** "Aerial Surveillance Quadcopter" 2016. Patented at *Intellectual Property India*.

Outstanding Student Volunteer Award by IEEE Delhi Section.  First position at EV Hackathon, India - Australia joint initiative.  Winner of World Food India Hackathon. Awarded by President of India.  Winner of Celstini Project India 2017,IIT Delhi Marconi Society. Sponsored by Google. (URL: www.celestiniprojectindia.com)  Travel grants: NSF for Mobicom 2017, ACM SIGMOBILE  All India 1st in eYantra Robotics Competition, IIT Bombay  All India 2nd in eYantra Robotics Competition, IIT Bombay  Ranked 44 in IEEE XTreme Hackathon  1st in Robotron TechMarathon, DDUC, Delhi University  Among top 6 in National CBSE Science Exhibition  1st in Regional level CBSE Science Exhibition  1st in Annual School Science Exhibition  2012  1st in Annual School Science Exhibition  2014  1st in Annual School Science Exhibition  2015  1st in Annual School Science Exhibition  2016  2nd in Annual School Science Exhibition  2017  LEADERSHIP  EXPERIENCE  Led a team of 200 students to organize the biggest technical hackathon in Delhi, India.  Chair of BVP IEEE Student Branch  Vice—Chair of Robotics Society, BVCOE  Chair of Robotics Society, BVCOE  1016  Chair of Robotics Society, BVCOE  Conducted more than 80 workshops accross India to teach programming concepts on Arduino/Raspberry, Image Processing and Project Management.  Conducted seminars on STEM Education in Delhi schools.
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• "DRIZY" Collaborative Driver Assistance Over Wireless Networks 2017
• Li-Fi (Data transfer through light) Demonstration 2017
• "PUSHPAK" Aerial Surveillance Quadcopter with Rover 2016
• Touch–Screen Based Home Automation 2016
• IOT based Temperature Logger with Remote Access 2016
• FireBird V Robot – Mars Rover Navigation and 3D Modelling 2016
• Raspberry pi-3 based Personal Cloud Storage 2015
• Anti Car Theft System with SMS alert application 2014
<ul> <li>Anti Car Theft System with SMS alert application</li> <li>Zig-Bee based Swarm Robotics</li> </ul>
· · · · · · · · · · · · · · · · · · ·
• Zig-Bee based Swarm Robotics 2014

- TECHNICAL SKILLS  $\mathbf{C}/\mathbf{C}++$ ,  $\mathbf{Python}$ , Matlab, Embedded C
  - Computer Vision, Image Processing
  - Raspberry Pi, Arduino, 8051, Atmel-AVR, Texas-MPU
  - Pixihaux, APM 2.6/8, KK2 Flight Controllers