

# Nakul Garg

CONTACT INFORMATION	A-36, Ashoka Encalve Peeragarhi New Delhi, 110087 INDIA	Contact : +91 8800 565859 e-mail id : <a href="mailto:nakulgarg.2208@gmail.com">nakulgarg.2208@gmail.com</a> git : <a href="https://github.com/Nakul22">https://github.com/Nakul22</a> website : <a href="https://sites.google.com/view/nakulgarg/">https://sites.google.com/view/nakulgarg/</a>
EDUCATION	<b>University of Maryland, College Park</b> Ph.D. in Computer Science	Aug. 2019–Present
	<b>Guru Gobind Singh Indraprastha University</b> B.Tech. in ECE, 70%, Converted GPA 4.0	Aug. 2014–May 2018
	<b>St. Marks School</b> , New Delhi, India 12 <sup>th</sup> C.B.S.E, 90% 10 <sup>th</sup> C.B.S.E, 82%	Jul. 2014 Jul. 2012
SELECTED PUBLICATIONS	<b>N. Garg</b> , A. Anand, B. Chagglani, A. Ashok, “Visible Light Communication in Drones,” (in submission), 2019. <b>N. Garg</b> , I. Janveja, D. Malhotra, C. Chawla, P. Gupta, H. Bansal, A. Chowdhery, P. Mukherjee, and Brejesh Lall, “DRIZY- An IOT based Driver Assistance System,” (in submission), 2018. I. Janveja, <b>N. Garg</b> , C. Chawla, J.Parikh. “Aquacomm: Underwater Visible Light Communication,” IndiaCom, India, 2018. <b>N. Garg</b> , I. Janveja, D. Malhotra, C. Chawla, P. Gupta, H. Bansal, A. Chowdhery, P. Mukherjee, and Brejesh Lall. “DRIZY—Collaborative Driver Assistance Over Wireless Networks,” <b>ACM MobiCom</b> Poster, Utah, USA, 2017. <b>N. Garg</b> , J.Parikh. “Wireless transceiver design for visible light communication,” ICICI, India, 2017.	
FILED PATENTS	<b>N. Garg</b> “Advanced IoT based Home Automation System without Rewiring”, 2016. Intellectual Property India Serial No. 201711020040	
EXPERIENCE	<b>Research Assistant</b> Sept. 2018—July 2019 Computer Science Department, IIT Delhi <i>Advised by</i> :, <a href="#">Dr. Rijurekha Sen</a> <b>Technical Advisor</b> May 2018—Sept. 2018 Celestini Project India, Marconi Society, Google, IIT Delhi <i>Led by</i> :, <a href="#">Dr. Aakanksha Chowdhery</a> (Google AI) and <a href="#">Dr. Brejesh Lall</a> (IIT Delhi) <b>Project Intern</b> Jun. 2017—Sept. 2017 Celestini Project India, Marconi Society, Google, IIT Delhi <i>Led by</i> :, <a href="#">Dr. Aakanksha Chowdhery</a> (Google AI) and <a href="#">Dr. Brejesh Lall</a> (IIT Delhi) <b>Technical Executive</b> Aug. 2016—Jul. 2017 Robotime Robotics Lab (STEM in schools) <b>Trainee</b> Sept. 2015—May 2016 Embedded Systems, IQB Solutions, Delhi	
POSITIONS OF RESPONSIBILITY	<b>Chairperson</b> BVP IEEE Student Branch 2017 - 18 • Led a team of 200 students to organize one of the biggest technical hackathon in Delhi, India. <b>Vice–Chair</b> of Robotics Society, BVCOE 2016 - 17	

	<ul style="list-style-type: none"> <li>Conducted workshops across India to teach programming concepts on Arduino/Raspberry, Image Processing and Project Management to 200+ students.</li> </ul>	
	<b>Head Event–Manager</b> , Fervour - Technical Fest of college.	2017
	<ul style="list-style-type: none"> <li>Organized 17 technical events in campus with an outreach of 1000+ students in India.</li> </ul>	
AWARDS AND SCHOLARSHIPS	<ul style="list-style-type: none"> <li>University of Maryland Graduate School Dean’s Fellowship</li> <li>Outstanding Student Volunteer Award by IEEE Delhi Section.</li> <li>First position at <b>EV Hackathon</b>, India - Australia joint initiative.</li> <li>Winner of World Food India Hackathon. Awarded by <b>President of India</b>.</li> <li>Winner of Celstini Project India 2017,IIT Delhi Marconi Society. Sponsored by Google.(URL: <a href="http://www.celestiniprojectindia.com">www.celestiniprojectindia.com</a>)</li> <li>Travel grants: NSF for Mobicom 2017, <b>ACM SIGMOBILE</b></li> <li>1<sup>st</sup> in <b>eYantra - National Robotics Competition, IIT Bombay</b></li> <li>2<sup>nd</sup> in <b>eYantra - National Robotics Competition, IIT Bombay</b></li> <li>Ranked 44 in <b>IEEE XTreme Hackathon</b></li> <li>1<sup>st</sup> in Robotron TechMarathon, DDUC, Delhi University</li> <li>Among top 6 in <b>National CBSE Science Exhibition</b></li> <li>4<sup>th</sup> in <b>International Quanta</b>, CMS School, Lucknow</li> <li>1<sup>st</sup> in <b>Regional level CBSE Science Exhibition</b></li> <li>1<sup>st</sup> in Annual School Science Exhibition</li> <li>1<sup>st</sup> in Annual School Science Exhibition</li> <li>2<sup>nd</sup> in Annual School Science Exhibition</li> </ul>	2019 2018 2018 2017 2017 2017 2016 2015 2014 2013 2013 2012 2011 2010 2009
TECHNICAL PROJECTS	<ul style="list-style-type: none"> <li><b>"Aerogram"</b> Particualte Matter Sensor Network in 200 Buses across Delhi.</li> <li><b>"Near Sensor ML"</b> Reducing latency by bringing ML at edge.</li> <li><b>"PlugFree"</b> Autonomous charging of Drones. (Sponsored by GSU, USA)</li> <li><b>"Augur"</b> Visible Light Communication using Smartphone Camera</li> <li><b>"DRIZY"</b> Collaborative Driver Assistance Over Wireless Networks</li> <li><b>Li-Fi</b> (Data transfer through light) Demonstration</li> <li><b>"PUSHPAK"</b> Aerial Surveillance Quadcopter with Rover</li> <li><b>Touch–Screen</b> Based Home Automation</li> <li><b>IOT</b> based Temperature Logger with Remote Access</li> <li><b>FireBird V Robot</b> – Mars Rover Navigation and 3D Modelling</li> <li>Raspberry pi-3 based Personal <b>Cloud Storage</b></li> <li>Anti Car Theft System with SMS alert application</li> <li><b>Zig–Bee</b> based Swarm Robotics</li> <li>Automatic Rubiks Cube Solver</li> <li><b>Wireless Odometer</b></li> </ul>	2019 2018 2018 2018 2017 2017 2016 2016 2016 2016 2015 2014 2014 2014 2012
RESEARCH INTERESTS	Visible Light Communication, Mobile Computing, Robotics, Sensing, HCI	
SKILLS AND TOOLS	Languages : C/C++, Python, MATLAB, OpenCV, L <sup>A</sup> T <sub>E</sub> X, Verilog Technologies : Arduino, Raspberry Pi, Deep Learning, Computer Vision	
SOCIETY MEMBERSHIPS	Institute of Electrical and Electronics Engineers (IEEE) Association for Computing Machinery (ACM)	