

# Nischal K.N

## PERSONAL DATA

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DATE OF BIRTH: 3<sup>rd</sup> July 1992  
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## EDUCATION

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JUNE 2014 Bachelors of ENGINEERING, **M.S.Ramaiah Institute of Technology**, Banaglore  
Major: Electronics and Communication  
GPA: 9.56/10

MAR. 2010 2nd Year Pre University, **Seshadripuram Composite PU College**, Banaglore  
PERCENTAGE: 93.33%

MAR. 2008 CBSE 10th Grade, **Sindhi High School**, Banaglore, India  
PERCENTAGE: 90.80%

## PROFESSIONAL EXPERIENCE

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*Current* Embedded Systems Engineer at LI2 INNOVATIONS PVT LTD., Bangalore  
JUNE 2014 Development of Brahma3, India's first Indigenous 3D printer

JULY 2011 - Intern at LI2 INNOVATIONS PVT LTD., Bangalore  
MAY 2014 Worked on Robotics and Automation using AVR microcontrollers and Product development using MSP430 and Atmega controllers

## PROJECTS

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JULY 2014 **Cognitive Intelligence for Perception in a Humanoid** is a proof of concept to propose a novel architecture to link high-level cognitive skills to the perceptual and physical abilities of a humanoid robot.  
SUPERVISOR: Prof. M. S. Srinivas

JUNE 2012 **Unmanned Ground Vehicle** for the 20th Intelligent Ground Vehicle Competition held at Oakland University, USA. Lead a team that designed and developed an autonomous vehicle capable of lane detection, obstacle avoidance and GPS navigation. Secured 6th position in the event.  
SUPERVISOR: Dr. S. Sethu Selvi

JULY 2012 Less3(<3) a **rural health care monitoring system** comprising of non-intrusive sensors for measuring heath rate, blood pressure and body temperature and real time monitoring over GSM system.

DEC. 2013 **Direct Calibrated Analog Sensor Interface**, a VLSI project to develop a simple interface for analog sensors with calibrated direct readable outputs.

MAY 2012 **Li-Fi (Light Fidelity)**, a proof of concept of high speed data transmission over visible light.

## ACADEMIC PUBLICATIONS

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- DEC. 2013 **Face Recognition using Entropy-augmented face isolation and Image folding as pre-processing techniques** presented in an international conference INDICON-2013 organized by IEEE India council held at IIT, Bombay.  
DOI: [10.1109/INDCON.2013.6725928](https://doi.org/10.1109/INDCON.2013.6725928)
- OCT. 2014 **Correlating Night-Time Satellite Images with Poverty and Other Census Data of India and Estimating Future Trends** accepted at second ACM India SIGKDD Conference on Data Sciences 2015.

## SOFTWARE PROFICIENCY

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LANGUAGES: C, Python, Sketch  
DEVELOPMENT PLATFORMS: Visual Studio, Matlab, Code Composer Studio  
LIBRARIES: OpenCV  
WORD PROCESSING: LaTeX, Microsoft Word

## HARDWARE PROFICIENCY

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8 BIT MICROCONTROLLERS: AVR, 8051  
16 BIT MICROCONTROLLERS: MSP430  
PCB DESIGN: Express PCB, Eagle CAD  
MICROPROCESSORS: x86, Intel Atom

## CERTIFICATIONS

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JULY 2011 Advanced Embedded Systems course organized by Brics India Pvt. Ltd.  
FEB. 2009 Robo I workshop by Li2 Innovations Pvt Ltd.

## SCHOLARSHIPS AND AWARDS

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2014 Best Achiever award for the outgoing batch of 2014.  
2014 Best project award by MSRIT alumni association for the final year project titled Cognitive Intelligence for Perception in a Humanoid.  
2010 - 2014 Ministry of Human Resource and Development, Government of India Scholarship.

## OTHER ACTIVITIES

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2013-14 Chairperson of IEEE MSRIT Student Branch.  
2012-13 Vice-Chairperson of IEEE MSRIT Student Branch.  
2011 Represented MSRIT at Student Leadership Congress.  
2008 Represented Sindhi High School at All India CBSE Project exhibition.  
2007-08 First Prize at Website Design Competitions conducted by JIRS and Rotary Club.

## REFERENCES

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1. Dr. S. Sethu Selvi  
Head of the Department,  
Dept of Electronics and Communication,  
M.S.Ramaiah Institute of Technology,  
Bangalore - 54  
Email id: selvi@msrit.edu
2. Mr. Arvind Nadig  
Managing Director,  
Li2 Innovations Pvt Ltd.,  
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complex, Gokula 1st stage, Bangalore- 54  
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