

# Harshul Gandhi

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## EDUCATION

Degree/Certificate	Institute/School	CGPA/CAP	Year of Passing
MComp, CSE	National University of Singapore, Singapore	3.83	2015
B Tech, CSE	National Institute of Technology, Bhopal, India	8.05	2012

## PUBLICATION

- **Title:** Pixel area based target distance estimating and corresponding target hitting force calculating autonomous robots using single video device; **Conference:** IEEE, CINTI, Hungary, 2011. [\[URL\]](#)
- **Title:** High utility and low cost microcontroller based data acquisition system for antenna encoders; **Conference:** SPRINGER, ObCom 2011, VIT, INDIA. [\[URL\]](#)

## PROJECTS

### 3D reconstruction from 2D:

National University of Singapore, 2014

Made a 3D view of a 2D scene with the help of a single image of the 2D scene.

Used OpenCV, Python, Qt framework

### Android Incog Mode:

National University of Singapore, 2014

Studied Android for data vulnerabilities. Developed application to run other apps in Incognito (protected mode)

### Particle-RRT Algorithm:

National University of Singapore, 2014

Studied Rapidly exploring random tree algorithm and particle RRT algorithm.

Implemented p-RRT algorithm in C++

### EMBEDDED SYSTEM:

National Institute of Technology Bhopal, 2012

Data Acquisition System to read varying data from Antenna encoders to calculate the azimuthal angle of shaft of the device connected to the encoder

### MOBILE SHOPPING WEBSITE:

CMC, New Delhi, 2010

Developed online mobile custom shop using ASP.NET with C#

### A.I. AND ROBOTICS:

National Institute of Technology Bhopal, 2011

Implemented an algorithm for an autonomous robot, Catabot, that could discern the distance of a basket and throw a ball with precision to pass through it

### PROGRAMMING DIGITAL CLOCK:

National Institute of Technology, Bhopal, 2010

Developed an algorithm for a fully functional clock and implemented it using a 16x2 LCD and Atmega16L Microcontroller (Processor)

## INTERNSHIP AND TRAINING

### .NET using C# - Computer Management Corporation

New Delhi, India, May-July 2010

- Studied Language C# and developed many Console Based and Window Based Applications using C# and ADO.NET such as : School management system, Office Daily Management System, Notepad(Similar as in Windows with same functionality), Airlines Ticket Booking System

### Search Based Planning Algorithm - Center for Artificial Intelligence and Robotics, DRDO

Bangalore, May-July 2011

- Studied several research papers on informed search based path planning algorithms such as A\*, D\*, D\* Lite, Lifelong Planning A\*, Anytime Dynamic A\* and implemented D\* Lite algorithm in C++ language on Robot Operating System.

## WORK EXPERIENCE

### Business Technology Associate

ZS Associates

April 2013 – July 2014

- Developed technical system to assist high end designation people in managing large number of sales representative.
- Involved in design, development and testing (unit, system, integration) of the one project.

### Software Engineer

Verizon Data Services

June 2012 – Mar 2013

- Develop a system for Unified Ordering of all the products and services provided by Verizon.

## LANGUAGES AND TECHNOLOGIES

- Java, C, C#, Python, PHP, HTML, ASP.NET, CSS, MySQL
- Eclipse, Microsoft Visual Studio, Microsoft Visio, Microsoft Excel, CMS – Joomla

### EXTRACURRICULAR ACTIVITIES

- Over all coordinator of Inter NIT Robotics Championship'11, India, a National Level Event.
- Over all coordinated SWARM ROBOTICS workshop organized by IIT Kharagpur and ROBOSOFT SYSTEMS in Bhopal
- Attained 1<sup>st</sup> place in 'ZStart Academy Team Case Competition' where I solved a business case and presented the same solution.
- **SOCIAL** : Made an e-stick for blind people using TSOP