

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

Web App- OwnCloud extension:

National University of Singapore, 2015

Implemented features like invitation to comment, shared comments on a file, interactive tour, show online users.

Business Analytics - PlaceR:

National University of Singapore, 2015

Designed and developed a system for recommending places to a user based on his interest. Interest is derived from user's twitter account data.

Web Security-CSRF Scanner:

National University of Singapore, 2015

Developed a scanner to detect CSRF injection points in any web site/application and created automated selenium scripts at the end.

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++

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

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.

Software Engineer Intern Quantum Inventions

May 2015 – to date

- Developing infrastructure to support web service calls in an automated fashion. Technology: Java

WORK EXPERIENCE

Teaching Assistant

School of Computing, NUS

Jan 2015 – April 2015

- Organized lab sessions for course CS1020E – Data structures and algorithms at School of Computing, NUS
- Invigilate in lab tests and grade individual submission by scrutinizing them

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

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

LANGUAGES AND TECHNOLOGIES

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

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 1st 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