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EDUCATION

National University of Singapore, Singapore (GPA – 3.74/5)

Jul 2014 – Dec 2015

Master of Computing (Computer Science)

Courses: *Robot Motion Planning, System Security, Web Security, Computer Vision and Pattern Recognition, Business Analytics, Simulation, Distribution Systems, Data Mining*

National Institute of Technology, Bhopal, India (Score – 8.05/10)

Jul 2008 – May 2012

Bachelors of Technology (Computer Science)

Courses: *Data Structures & Algorithms, RDBMS, Operating Systems, Data Mining, Computer Networks*

PUBLICATIONS AND AWARDS

- **Awards:** Finalist of Singapore Hackathon. Winner of Best One Map Integration award. **Competition:** Hackathon@SG, 25th July 2015.
- **Research Paper 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]
- **Research Paper Title:** High utility and low cost microcontroller based data acquisition system for antenna encoders; **Conference:** SPRINGER, ObCom 2011, VIT, INDIA. [URL]

LANGUAGES AND TECHNOLOGIES

- Java, Python, Spring, HTML, CSS, JavaScript, C++, MySQL
- Eclipse, Microsoft Visual Studio, Microsoft Visio, Microsoft Excel, CMS – Joomla, Data Integration – Talend

PROJECTS

- **Car Park lots availability prediction:** Designed and developed a car park lot prediction system based on time series data. Semi Lazy Mining Paradigm technique was used to implement this system. *Technology: Python*
- **Distributed Multiplayer Maze Game:** Designed and developed multiplayer distributed maze game using RMI (Java). Developed Server-Client as well as Peer-to-Peer version. *Technology: Java RPC (RMI)*
- **OwnCloud File sharing web application plug-in:** Implemented features like invitation to comment, shared comments on a file, interactive tour, show online users. *Technology: JavaScript, PHP.*
- **PlaceR – Place recommendation Engine:** Designed and developed a system for recommending places to a user based on his interest. Interest is derived from user's twitter account data. *Technology: Python, Java.*
- **CSRF Scanner:** Developed a scanner to detect probable CSRF injection points in any web site/application and created automated selenium scripts to verify results. *Technology: Python, Scrapy.*
- **3D reconstruction from 2D:** Made a video showing 3D view of a 2D scene with the help of a single image of the 2D scene. *Technology: OpenCV, Python, Qt framework.*
- **Android Incog Mode:** Studied Android for data vulnerabilities. Developed application to run other apps in Incognito (protected mode).
- **Particle-RRT Algorithm:** Studied Rapidly exploring random tree (RRT) algorithm and particle RRT algorithm. Implemented p-RRT algorithm in C++. *Technology: C++*
- **Catabot – Autonomous Robot:** 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. *Technology: Microcontroller, C*

PROFESSIONAL EXPERIENCE

Works Application, Singapore

R & D Engineer | Jan 2016 – Present

- **Training:** Design and develop a web application to assist daily sales activities of a pharmaceutical organization
- Working on development of a Global Expense Management Application with various complex features
- Brain storming for new features of the application that would eventually improve UX and increase application's usability
- Design and develop these features in an efficient manner

School of Computing, NUS, Singapore

Graduate Student Researcher | Aug 2015 – Nov 2015

- Design and develop web application to generate questions related to topic selected from GUI
- Development done on Django

School of Computing, NUS, Singapore

Teaching Assistant | Jan 2015 – Apr 2015

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

ZS Associates, Pune , India**Business Technology Associate | May 2013 – Jul 2014**

- Worked on designing of a salesforce management system that helped our client to improve SFM
- Led a team of 4 to successfully develop, optimize and operationalize one of the key modules for a client
- Took initiative to significantly improve some of the activities done during development such as unit testing, system testing and integration testing
- Interact with client on a regular basis to gather change requests and incorporate that in existing system
- Trained the client on how to use some of the key features of the system
- Training sessions for team mates and new members, on technical and business specifications of the system

Verizon Data Services, Hyderabad, India**Software Engineer | Jun 2012 – Apr 2013**

- Part of the team that was developing a system for Unified Ordering of all the products and services provided by Verizon

INTERNSHIP AND TRAINING

Quantum Inventions, Singapore**Software Development Intern | May 2015 – Jul 2015**

- Developing infrastructure to support web service calls in an automated fashion. Technology: Talend-Java
- Design and develop prediction system and advertisement recommendation system based on car parking availability data and transport data. Technology: Python, PostgreSQL.

Defense Research Development Organization, Bangalore, India**Research Intern | May 2011 – Jul 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.

Computer Management Corporation, New Delhi, India**.NET with C# Trainee | May 2010 – Jul 2010**

- Developed many Console Based and Window Based Applications using C# and ADO.NET such as : School management system, Office Daily Management System, Windows Notepad, Airlines Ticket Booking System

EXTRACURRICULAR ACTIVITIES

- Graduate student representative at National University of Singapore for 2014-15 session
- 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