Awards and Achievements

- Secured percentile of **99.81 amongst 224160** students in **GATE 2013**.
- **Oracle® Certified Professional** JAVA SE 6 Programmer. Cleared OCP-JP 6, 2014 with 90%.
- **Microsoft® Specialist** in programming in HTML5 with JavaScript and CSS3, 2012. Cleared the certification with 76%.
- Secured rank of **6 in 200** students in college's annual computer science conference **IC3, 2010** for the project **Voice controlled obstacle detector**.

Industry Experience - 24 months

- Worked as **ASE at CSC India Pvt. Ltd., Noida**. My project was in Healthcare domain, in a team of 13. The software is used by clinicians at hospitals in Denmark, where healthcare is mostly public. Objective is to document and co-ordinate all activities related to treatment of a patient.
- Delivered 3 external and 1 internal module for the project and was involved in all aspects of SDLC. **Technologies/Tools:** JAVA SE-6(Core), Swing, XML, Oracle, SVN, Intellij Idea.

MTech Courses

Program Analysis, Network Security and Cryptography II, Natural Language Processing, Software Architecture, Computer Networks, Engineering a Cloud, Introduction to Number Theory and Cryptography

Post Graduate Research/Projects

Homomorphic Encryption Over Vectors with application to SCM - *M.Tech. Thesis* [Autumn 2015 - present]
Guide: Prof. Bernard Menezes

- Implement Zhou's scheme for efficient homomorphic encryption over integer vectors and improve performance by making use of multiple cores and multiprocessing.
- Apply the above solution to predict inventory needs based past data which would be homomorphically encrypted.

Homomorphic Cryptography - *M.Tech. Seminar* [Spring 2014]

- Survey various techniques that allow homomorphic encryption of data fully or partially. The relative efficacy of the techniques and the practicality of the implementation was also researched.

Cloud based memcache clone - *Course Project* [Spring 2014]

- Goal: 5 servers maintain a replicated memcache table. The servers are cemented together with a RAFT based consensus algorithm. Built using golang.

Emotion detection from live chat - *Course Project* [Autumn 2014]

- Goal: Develop a system to analyze data from a text based chat, and as an output display the predicted emotion portrayed. This was a python based project in which we extensively used the nltk library.

QT based SpecRTL visualizer - *Course Project* [Spring 2013]

- SpecRTL is an easy to write yet difficult to visualize machine description language. A Qt based tool was developed which takes as input the specRTL code and produces a tree based graphic output.

RA Work - System Administrator

- Deployed printer bank and print accounting solution.
- Deployed iSCSI based filesystem that is used by all lab machines via NFS.
- Configured department servers with IPMI for low level management and emergency maintenance.
- Established the FOG server for automated creation and deployment of OS images on all lab systems.

Skills

- **Languages/Scripting**: C/C++, JAVA(Core), golang, Python, bash, HTML5, PHP, JSP/Servlet
- **Tools**: gnuplot, LaTeX, git, vim, Eclipse