# ALL INDIA SHRI SHIVAJI MEMORIAL SOCIETY INSTITUTE OF INFORMATION TECHNOLOGY

DEPARTMENT OF COMPUTER ENGINEERING







Objective behind Technical Magazine

Department of Computer Engineering is very happy and proud to publish technical magazine of year 2015-16. Through this technical magazine we wish to share quality of final year projects and the experience of our alumni during their MS.

Department has set objective to bring technical competency among the students. Department is taking efforts for the same since second year of these students. Outcome of these efforts is reflected through their final year projects ,placement and admission to higher studies.

We had contacted alumni who are pursuing their post graduate degree Master of Science and doing job in India and outside India. We are sharing experience of these alumni with our students through this magazine. Our objective behind sharing this information is to motivate students and to create awareness among students about work culture during MS and Job (in India and outside India).

Coordinator HOD

S.P.Pimpalkar S.N.Zaware

MS has given me an understanding of Computer Science as a whole and after all, I'm getting to learn here on a much higher scale than I did for my Undergraduate studies. I am getting to excel in my field of specialization in Computer Science i.e. Database Systems which has given me a deeper understanding of the field along with its pros and cons. This would in turn help me during my job applications. USA has a real good social life and is of course full of competition and a good amount of hard work.

## Yasha Sardey

I am glad to help publishing some information about higher studies. My experience of completing my MS in US has been very enlightening. There are different paths that students can chose while doing their MS. Below are certain paths I have noticed.

- 1. Oriented towards job placements: In this path, students mostly concentrate of taking courses that will click with market requirements. Some of them might also be a pure repeat of a course from Bachelor's degree.
- 2. Research oriented: This path involves doing dedicated projects and/or Thesis under a Professor. Not many students take this path. I chose this path, because I wanted to leverage the opportunity of learning more during my Master's. I completed my Master's with a Thesis. For more details see: <a href="http://gradworks.umi.com/15/08/1508003.html">http://gradworks.umi.com/15/08/1508003.html</a>
- 3. Oriented towards enhancing beyond CS fundamentals: In this path, students have judiciously chosen course that would enhance the skills to excel understanding the CS problems. They do not shy away from taking more challenging courses being offered.

To make the most of time and money investment, I would recommend students taking Path 2 or 3. Apart from studies, students should also take time to work on side projects or work with a Professor to maximize the benefit from a MS. Such experience(s) puts a candidate ahead of the rest.

Irrespective of the path chosen, MS in US is very hands on and requires working on projects and assignments towards scoring a grade. The universities are very critical about the extent to which students collaborate on their assignments. They run plagiarism detection tool on every students assignments. It's not been a problem for me as you know I always did my assignments during Bachelors to, but I have seen certain students getting in trouble for plagiarism. Irrespective of the path chosen, MS in US is very hands on and requires working on projects and assignments towards scoring a grade. The universities are very critical about the extent to which students collaborate on their assignments. They run plagiarism detection tool on every students assignments. It's not been a problem for me as you know I always did my assignments during Bachelors to, but I have seen certain students getting in trouble for plagiarism.

All the projects that I have worked on are up-to-date on my LinkedIn Profile.

• https://www.linkedin.com/in/prasannapilla

#### Prasanna

I am pursuing Masters in Data Science at Indiana University, Bloomington. There are a few specializations to go with where you choose the subjects pertaining to it, Natural Language Processing, Machine Learning, Artificial Intelligence, High Performance Computing, computer Vision being a few. So you can choose from a diverse set of courses from various Departments like Statistics, Linguistics, Computer Science, Library Science, etc.

What I observed is that irrespective of the field, **Statistics** plays an important role. Also a lot of courses focus on programming assignments and semester-end projects along with project reports for grades.

Let me know if anything else is needed.

Ashwin Nimhan

#### Anubhuti Chaudhari

Hello Ma'am,

I am doing good. I am presently in Santa Clara, California.

How have you been?

I would love to help you out with the details of my work:

I am currently working as an Information Security Engineer for Eventbrite in San Fransisco, California. Its a Multinational ticketing platform Company for Organizing events all around the world. I largely work with the following technologies:

- 1. On UNIX Operating System platform with Programming in Python and working with Amazon AWS environment.
- 2. Work with web application security, browser security models, and application security vulnerabilities such as the OWASP Top Ten.
- 3. Security principles including confidentiality and integrity of data, authentication and authorization protocols, cryptographic protocols, network attacks, DDOS (Distributed Denial of Service) attacks, Phishing, email protocols/security/spam, encryption, authentication, logging and log analysis, IP and device reputation, and security PCI(Payment Card Industry) Compliance policies.

Please let me know if you want me to send any more details and if there is anything that I can do for you. Thank you so much for considering me to provide this information. Have a great day ahead!

Regards, Anubhuti Chaudhary (408) 833-0778

## A Glimpse into World of Hacking

By Milan Singh Thakur (Ex-IOITan) Security Researcher

We have all heard about Hacking and are well aware of what hackers can do with your personal information. In last decade, the Cyberspace has undergone many technological changes. This has resulted in mass concentration of hackers and crackers on financial data. So let's understand how this world of hacking is in an **Ethical Way..!!** 

Don't think of a hacker to be a kid/person sitting in dark room, surrounded by computers (as shown in most of the movies) are hackers/crackers. But these are people with very good understanding of computer hardware, programming skills, networking, various operating systems, most of the software applications and Geeks of their field of interest. Let's also understand the terms Hacker and Cracker. A Hacker is a person who is authorized (officially) to find and exploit the security loopholes in a system/software/website. Cracker does same thing, but illegally.

My Job....!!

As a part of Information Security World, I specialize in **Mobile Application Security**. We cover platforms like Android, iOS, Windows and Blackberry. We try to break into mobile applications running on any of these platforms.

Finding loopholes or security flaws in mobile applications is part of my job. Also I do Web application security, network security, penetration testing, security audits and research for new loopholes. Recently I have started working on Internet of Things (IOT) which involves hacking into any device like car, fridge, washing machine, smart home systems, smart TV and everything that is connected to internet.

Let's take an example of mobile banking application on your Smartphone. What can a hacker do?

A hacker can steal your username passwords (not just banking credentials but all other loginID and passwords like FB, gmail, etc) by just injecting a malware into your phone. He can read all your SMS, listen and record all your calls, track your gps location, steal your personal pics/videos, format your phone and a lot more ©. This is exactly what we demonstrate to the client in our daily routine.



**Armin Ghyara**Senior Application Developer at Merchants Information Solutions

Pursued Masters in Management Information Systems (Dec 2013) from at the University of Arizona (Eller College of Management) with concentration in Business Intelligence and Web Analytics.

Eller College of Management is one of the top 5 colleges known for its Management Information Systems course

A motivated IT professional with 8+ years of experience as a System Analyst and Software developer. Possess knowledge of Object-Oriented Design and Analysis, data analysis with experience in SDLC. Always looking for an exciting and progressively challenging position where proven decision making, leadership and technical abilities will be used and appreciated.

Experiences leading team members and mentoring them for various projects both in professional and educational environment. Served as a technical/business liaison across projects.

- 1) Design and develop a multi-module complex application using C#, MVC 4.0, ASP.Net, LINQ, Entity Framework, JQuery, and PL/SQL, including mobile and responsive websites, libraries, and WCF services.
- 2) Responsible for developing automation test scripts using Selenium and .Net unit test that helped reduced the QA test time to approximately 60% and increased testing quality.
- 3) Responsible for custom integration of client systems based on different client requirements.
- 4) Generated SSRS reports using SQL Server, SQL scripts and store procedures to assist management in analyzing progress and usage of the application.
- 5) Worked on developing a prototype map dashboard using SVG and Asp.Net



Manish Patil
Automation Engineer at Axway

Experience in Development, Design, QA Techniques, System Analysis, Verification and Validation in Software Applications, Development Methodologies and Documentation.

- Hands-on Experience in Object Oriented Programming languages like Java, C#
- Worked in SDLC and STLC in Waterfall and Scrum methodologies
- Experience in creating Modular Driven test automation and Hybrid frameworks, with Selenium WebDriver, Java, TestNG/JUnit, Jenkins, Git
- Experience in Consuming RESTful Web Services and Automation Testing of REST Web services using Jersey
- Working knowledge of RDMS, experience in Database Design, Developing SQL queries and Stored Procedures
- Expertise in Business Intelligence Tools SSIS Data Integration Tool and SSRS Reporting Tool
- Skilled in web applications development technologies like Angular JS, JavaScript and JQuery / AJAX



# **Shivam Patil**

Software Quality Assurance Engineer II at comScore, Inc.

- Experience in IT industry with an experience in testing Software-as-a-Service products, Banking Software Applications, Web based Applications and websites.
- Strong grip on testing concepts and agile methodology
- Good experience in all stages of Software Development Life Cycle and Software Testing Life Cycle
- Good experience in Defect and Configuration Management (Quality Center, JIRA)
- Experience in understanding the client's business requirements
- Implementing testing processes as per standards defined by the organization
- Peer review of prepared test-ware
- Excellent communication and team-management skills