

**Academic Achievements**

Education	Year	Board/University	%/CGPA
PhD, Library and Information Science	2013-	University of Illinois at Urbana-Champaign	3.91/4.0
Bachelor (Honors) & Master in Science in Mathematics & Computing	2007-12	Indian Institute of Technology, Kharagpur	7.29 /10.0
Standard XII	2007	ISC, Boys' High School, Allahabad	94.75 %
Standard X	2005	ICSE, Boys' High School, Allahabad	92.0 %

**Awards**

- Certificate of distinction in **Machine Learning, Social Network Analysis, Social and Economic Networks** and **Introduction to Data Science** on Coursera 2012-13.
- **KVPY scholar**, 2007-2012, the most reputed scholarship for science students in India.
- **100% in Mathematics** in ISC board exams, 2007
- Awarded **Trisham Medal for Best Mathematician in School**, 2007
- State Rank **3rd** in Uttar Pradesh **Regional Mathematics Olympiad**, 2006
- **School Whiz kid Gold Medal** for **19<sup>th</sup>** rank in **National Cyber Olympiad**, 2006

**Research Experience****Research Assistant with Jana Diesner, UIUC** **August, 2013 - Current**

- Developing ConText tool for extracting and analyzing text networks [[context.lis.illinois.edu](http://context.lis.illinois.edu)]
- Developing Entity Extractor for network data usage.

**Research Assistant with Vette Torvik, UIUC** **August 2013 - Current**

- Developing tool for mining relations from NSF grants.

**Publications**

- Diesner J, Aleyasen A, Kim J, Mishra S, Soltani S (accepted) Using Socio-Semantic Network Analysis for Assessing the Impact of Documentaries. WIN (Workshop on Information in Networks) 2013, New York.

**Work Experience****Software Engineer at Citrix R&D, India** **July, 2012- July, 2013**

- Kernel level features in **C** for authorization and content switching policy for NetScaler 10.1
- **Java** based Web Interface module on NetScaler
- Real time document annotation and chat collaboration UI for Podio workspaces in **Node.js**
- Java based LinkedIn data search-engine for data of all company employees in internal network.

**Global Technology Analyst, Barclays Capital, Singapore** **May - July, 2011**

- Finished all objectives by mid-term and took addition project, both of which were successfully deployed.
- Enhanced 6 year old VB 6.0 software and documented it which saved the team 1 week per month of work.
- Developed a web based application using **C#** for deployment of scripts on OpenLink and Oracle.
- Secured **4.77/5** with a performance grade of **A** in Final Appraisal.

**Lead Web Developer, Global Venture Lab, Finland** **December - January, 2009-10**

- Prototyped the company portal for networking & project management of its global membership.
- Developed & administered the company website, and coached the employees on its usage.
- Received recommendation from the whole team & executive board of GVL.

**Research Assistant, Institute of Systems Science, National University of Singapore** **May - July, 2009**

- Developed a co-creation, cloud based, dynamic data and maps mash-up called **Tagging Singapore**.
- More than 20 events website data from Singapore was scrawled and formatted to be used as a service in our application. The application was deployed on a cloud platform, Google App Engine.
- My work was incorporated as a workshop exercise in the course on Service Innovation [SG5228].

## Projects

### **Sentinets - User Classification Based on Sentiment for Social Causes within a Twitter Network** 2012

- New classification schema for classifying tweets related to social causes.
- Tool for fetching tweets and classifying them based on our orthogonal set of sentiment classes.
- Accepted at Social Media Expo, iConference 2014, Berlin.

### **Analysis of Social Media Data to determine Positive and Negative Influential Nodes in the Network – Master Thesis** 2011-12

- Designed a system which used a heuristic algorithm and sentiment analysis techniques to predict the positive or negative influence of a person in their social networks like Facebook and Twitter.
- We used POS-tagging the updates made by the individuals in their network and running sentiment analysis.
- Designed a heuristic for ranking individuals based on overall positive, negative and aggregate influence.

### **Automated Car Parking System, IIT Kharagpur** 2010

- Developed an Automated Car Parking Algorithm which utilized fuzzy logic for defining vehicle parking maneuvers & neural network model for parallel & oblique parking detection using image processing.
- Created a Simulator for the same using **C#** and integrated it with real time camera and sensors feed which was processed using **Matlab** code output.

### **Web Based Device Control System, Standard XI** 2005-06

- Developed a Linux based system to control devices connected to a computer system using an online portal.
- Developed the testing circuit for the same using opto-isolator, transistor and parallel port programming in C.
- **1<sup>st</sup> Prize** in IT BHU in National Software Presentation event & **3<sup>rd</sup> Prize** at IIIT Allahabad.

### **Platform independent USB Data Encryption files system, D-Crypt** 2009

- We developed platform independent, scalable, encrypted custom file system for USB drive where we split each file into 128kbs of data and stored in on scattered location on the file system.
- Used sha1, 128bit AES and RSA as encryption algorithms for various parts of the file system.

### **Term papers on Meta Search Engine using Neural Networks and Intrusion Detection using Genetic Algorithms Fuzzy Logic, Soft Computing Course** 2010

- Meta search engine which aggregated search results from search engines lines google, yahoo, etc. and then used neural networks to determine the relevancy and ranking of search results from each search engine.
- Intelligent intrusion detection systems based on the TCP/IP protocol which utilized Fuzzy Logic and Genetic Algorithms to detect intrusion detection attacks.

## Positions of Responsibility

### **CEO & President, AIESEC IIT Kharagpur** 2011-12

- Managing a team of 60 students, hosting 24 international interns and sending 10 students abroad for internships and delivering 117% overall growth with more than 100% growth across all sectors.
- Cultural Envoy for Exchange and Development at Singapore and helped the National team in operations.

### **Vice President, Communications & Information Management, AIESEC IIT Kharagpur** 2010-11

- Led a team of 13 delivering more than **2000% growth** in communications performance since last 2 years.
- Initiated social media channels, campaigns, media releases and events to increase brand & sales of AIESEC.
- **3 national awards** for **#1 in Virtual Platform Utilization, Twitter Performance & Campus Promotions**.
- Represented IIT Kharagpur at **International Conference, 2010**, Hyderabad and 2 National Conferences.

### **Web Team Member, Kshitij 2009, IIT Kharagpur** 2008-09

- Started 1<sup>st</sup> ever National Online Hacking competition, **Hacked in Kshitij 2009** with 1200+ participation.
- Developed & administered the main website [**www.ktj.in**] along with Online Trading & Simulation games & online competitions with total user base of more than 25000 students, globally.
- Administered **ACM ICPC C/C++/Java Overnite** Challenge, developed an online code evaluation system.