

EDUCATION

Degree/Course	Institute/School	CGPA/Percentage	Year
Integrated MSc in Mathematics And Computing	IIT Kharagpur	8.55/10	2011-present
Board of Secondary Education M.P.(Class XII)	Gyandeeep Higher Secondary	81.6%	2009-2010
All India Secondary School Examination(Class X)	Kendriya Vidyalaya	90% (PCM-97.5%)	2007-2008

SCHOLASTIC ACHIEVEMENTS

- Offered a full time position as Software developer at ezDI Ahmedabad based on the work as technical intern [2015]
- Ranked **5** in the department of Mathematics and Computing, Indian Institute of Technology, Kharagpur [2015]
- Recipient of **INSPIRE**, a merit based scholarship awarded on the basis of academic performance [2012]

SUMMER INTERNSHIPS

Software Developer ezDI Health Informatics, Ahmedabad Summer 2015

Web Application : a **search engine** for International Classification of Diseases **ICD-9** and **ICD-10**

- Developed a high performance search engine in Java and reduced the turnaround time to less than **8ms** for any medical title
- Implemented a see-mapping tool that enabled deep search and enhanced the performance for see and see-also links
- Proposed back-end hierarchical XML database model for over 2 lakhs medical terms that reduced the server space
- Technology stack – Spring-Boot, Spring-MVC, Apache lucene, GZip, JSoup; Regex for pre-processing unstructured data

Research Internship Karlsruhe Institute of Technology, Germany Summer 2014

Client-side **Java plugin** for Scientists to access sensible data from grid database

- Implemented a Java plugin for Unity software service providing authorization functionality on proxy certificates (PC)
- Provided digital attributes to client's PC that is used to access sensible resources on **big data** grids
- Explored Cryptographic aspects of the client-server architecture that uses Public Key Infrastructure (PKI) for authorization

Technical Internship OdigMa, Bangalore Summer 2013

Development of tool that analyses Twitter trending Algorithm

- Extracted data from Twitter API 1.1, stored it in a relational database with schema and analysed data on different features
- Created an online web interface where an end-user can access this tool and compare the graphs between trends and parameters
- Technologies used - PHP, JavaScript, MySQL; Libraries - jQuery and highcharts.js

PROJECTS

Master's Thesis Project July'15-current

- Pattern recognition** : Design an algorithm to cluster and analyze time-series curves that is robust to outliers and anomalies
- Explored different clustering algorithms – K-Means, DBSCAN to get the best result for hierarchical clustering
- Evaluated the model on Canadian weather dataset using python libraries : scikit-learn, pandas, seaborn, numpy, requests

Natural Language Processing July'15-current

Understanding tweets of people during disaster and how it varies over time

- Built a web interface for real-time tweet classifier to separate out political, communal and charity tweets
- Extracted the best features for model, incorporated Support Vector Machine as classifier
- Achieved 87% in-domain and 81% cross domain accuracy for historic disaster events
- Paper submitted to **ACM Conference on Human Factors in Computing Systems (CHI)** 2016, San Jose, United States

Application Development

- Developed an android app **ScienceProject** for Akash tablet, to explore different science projects (sponsored by MHRD) [2013]
(Advised by Prof. Anupam Basu, Department of Computer Sceince)
- Developed a C# app **SOS** on Windows platform which sends geo-tagged location to close contacts in emergency [2014]
(Hackathon organised by Microsoft, IDC)
- Implemented a Java GUI application for the project Newspaper Agency Automation Software NAAS [2014]
(Software Engineering lab)

RELEVANT COURSEWORK

Natural language processing	Machine Learning	Probability and Statistics	Statistical Inference
Software Engineering	Operating Systems	Object oriented system design	Computer Networks

LANGUAGES AND TECHNOLOGIES

- C, C++, Java, Python, MySQL, Javascript, HTML, CSS, LaTeX, scikit-learn, NLTK, pandas
- Eclipse, iPython Notebook, Pycharm, MATLAB; Linux, Android SDK