Senior Undergraduate
Dept. of Maths. & Stats.
IIT Kanpur

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ACADEMIC RECORD

Year	Degree	Performance
2015(expected)	B.S. Maths and Sc. Computing	CPI : 6.6/10
2011	Intermediate ISC(class XII)	94.25%
2009	High School ICSE(Class X)	96.2%

RELEVANT COURSES

- Mathematics for Machine Learning
- Probability and Statistics
- Computer Vision
- Computational Geometry [2]
- Artificial Intelligence
- Discrete Optimization [1]
- Data Structure & Algorithms
- Time Series Analysis [2]

[1] Online Course offered by coursera.org and edx.org
[2] To be completed by Nov '14

KEY PROJECTS

Blind Navigation App　　　　　　**IIT-Kanpur**　　　　　　**Feb '14 - now**
- Project under Prof. Vinay Namboodari, Dept. of Computer Science & Engineering, IIT Kanpur
- Android App for the blind people for Indoor-building Navigation. SLAM for Android mobile is used.

Connectomics　　　　　　**IIT-Kanpur**　　　　　　**Feb '14 - now**
- Project done under Prof. Amitabh Mukherjee, Dept. of Computer Science & Engineering, IIT Kanpur
- Based on a competition on kaggle.com in which the brain structure and some of its disease alterations were explored.

Coordinator, App development　　　　**Svagatagami Assosiation**　　　　**June '13 - till date**
- Android Apps were developed for children with problems like mental retardation, autism, hyperactivity & Attention Deficit Disorder
- Apps won **1st prize** in **SoCha** competition of E-Summit, IIt Kanpur

Dropout method for Neural Networks　　　　**IIT-Kanpur**　　　　**May '13 - July '13**
- Project done under Prof. Arnab Bhattacharya, Dept. of Computer Science & Engineering and Prof. Sharmishtha Mitra, Dept. of Mathematics & Statistics, IIT Kanpur
- Dropout method of randomly omitting hidden nodes to improve efficiency was examined

Research Crawler　　　　　　**Winter Internship**　　　　　　**Dec '13**
- Project involved web-crawling and Natural Language Processing
- scikit, numpy, nltk modules of python were used
- Research papers were collected through crawling of Bing and Spider-crawl and then they were clustered to discover patterns

EGM-2008　　　　　　**IIT-Kanpur**　　　　　　**May '12 - June '12**
- Project was done under Prof. Akash Anand, Department of Mathematics & Statistics, IIT Kanpur
- EGM-2008 model of Earth's Gravitation Field was modelled in Matlab and implemented in spherical & cartesian co-ordinates

Cloud Pad　　　　　　**Electronics Club, IIT-Kanpur**　　　　　　**May '12 - June '12**
- Implemented real-time gaming using UDP protocol via Socket Programming

Connexion　　　　　　**Yahoo HackU**　　　　　　**Sept '13**
- Implemented a Web-scraping based model in python in which given any two movie-personalities, it shows the connections between them in form of common movies, significant years or any other relation.

Carrom Game　　　　　　**Programming Club, IIT-Kanpur**　　　　　　**Dec '11**
- AI based implementation of Carrom game in Python using pygame module

TECHNICAL SKILLS

Programming Languages : C, C++, Java, Python, MPI(in C)
Tools : MATLAB ®, R-language, GNU Octave, LaTeX, HTML, CSS, Javascript, Jquery, AutoCAD ®, Autodesk 3ds Max ®, Code Vision AVR, AVR Studio ®, Android App Development, Asp.net

SCHOLASTIC ACHIEVEMENTS

- Qualified **RMO** (Regional Mathematics Olympiad)in 2010(Class XI)and 2011(Class XII) with State Rank 13th and 5th respectively.
- Recepient of **KVPY** (Kishore Vaigyanik Protshahan Yojana) by Department of Science and Technology, India
- Won **First** Prize in FossDev in **Takneek 12** (Intra IIT-K technical fest) for designing a Brick Game in Python
- Won **First** Prize in **Ad-making** Competition in Sept 12 organised by Animation Club, IIT Kanpur
- Got **A*** in *Data Structure & Algorithms* course for being among top 1% of the class

EXTRA-CURRICULAR ACTIVITIES

- Working as **Head**, Web-development team of **POWER**, IIT Kanpur
- Worked as a **Secretary** of **Animation Club**, IIT Kanpur
- Currently **Green-1 belt** holder in **Taekwondo**
- **Coordinator** of Carrom in **Udghosh 12**, an Inter-Collegiate sports fest of IIT-Kanpur
- **Academic Mentor** in Counselling Service, IIT Kanpur for the year 2012-13
- Was involved in debating at school-level
- Knows **Salsa**, a dance form