

Education			
Degree/Examination	Institution	Year	Grade
B.Tech(upto 6 th semester)	Indian Institute Of Technology,Kharagpur	2012-2016	CGPA - 9.47/10 Rank - 8(Total),6(BTech)
High School	Calcutta Boys' School	2011	91.5%
Secondary School	Calcutta Boys' School	2009	90.2%

Relevant Courses Taken		
Programming and Data Structures	Algorithms-I	Algorithms-II
Machine Learning [#]	Artificial Intelligence [#]	Natural Language Processing [#]
Formal Languages and Automata Theory	Software Engineering ^L	Probability and Statistics
Computer Organization and Architechture ^L	Signals and Systems ^L	Switching Circuits and Logic Design ^L
[#] To be completed before Dec 2015 ^L Subject has Lab component		

Internships

Context Aware Media Content Analysis

Mentors: Dr. Shiv Saini, Dr. Atanu Sinha

Adobe Big Data Intelligence Lab, May - July 2015

- Studied the patterns of how a media article gets consumed.
- Developed an Android Application ProReader (Available on Play Store) to study media consumption pattern.
- Made a Linear Regression predictive model to predict the context in which a new media article would get consumed.
- Implemented the linear regression model in R.

Human Activity Recognition

Mentor: Dr. Shiv Saini

Adobe Big Data Intelligence Lab, May - July 2015

- Developed an Android Application to collect sensor datas.
- Analyzed different patterns in data while a person is in different context while reading.
- Applied machine learning models to estimate the context of the user.

Key Management Scheme for Distributed Sensor Networks

Mentor: Dr. Sushmita Ruj

Indian Statistical Institute, May - June 2014

- Studied how the information travels between two nodes within a network.
- Analyzed how the average degree of nodes,average path length changes if an adversary attacks some nodes in the network.
- Simulated the above network using networkx in C++.

Academic Projects

BTech Project : Spam detection in meta-data of YouTube videos

Mentor: Dr. Pawan Goyal

Jan 2015 - Current

- Analyzing how spammers post videos with false metadata to increase views and likes of the videos.
- Analyzing the comments,view,likes/dislikes and other feature associated with the video to tag whether a metadata is false or not.
- Adapting NLP techniques to get sentiments of the comments and ML techniques to get classify metadata as spam or not spam.

Error concealment in videos

Mentor: Avisek Lahiri

JAugust 2015 - Current

- Used dlib library to run the face landmark detection algorithr in live webcam video.
- Used openCV to run delaunay triangulation on the points present on the face, thereby segmenting the face.
- Used Matlab to calculate the affine inverse and thus using the previous frames of videos to fill the bad pixels in current frame.

Database Management Term Project : IPL Auctioning System

Mentor: Dr. Pallab Dasgupta and Dr. Animesh Mukherjee

April 2015

- Crawled Wikipedia and official IPL websites to get the IPL Auctioning data.
- System was designed using Java Swing Library.
- Supported various range queries and standard auctioning queries on the dataset.

Complex Network Term Project : Twitter LIWC

Mentor: Dr. Animesh Mukherjee

January - April 2015

- Manually increased the size of categories of LIWC by adding words and emoticons that are used in OSN.
- Used dictionary to convert out of vocabulary words used in OSN to in vocabulary words.
- Implemented an algorithm of distributional thesarus to increase the words in each categories.

Compilers Term Project :Compiler for tinyC language (a subset of C-language)

Mentor: Dr. Partha Pratim Das

August 2014-Nov 2014

- Used flex for lexical analysis and Used yacc for writing the grammar rules and actions.
- Supported recursive functions.

Software Engineering Term Project: Online Sales Portal

Mentor: Dr. Partha Pratim Das

April 2014

- Made an GUI Application using Java Swing.
- The idea was similar to buy and sell products online like eBay,OLX.

Startup

- Patent Pending (295/KOL/2015): A system and method for range independent tamper proof tracking
- Finalist at Ideas '15 Techkriti, Business Plan competition
- Finalist at Kshitij Business Plan competition, for the most innovative startup idea

Achievements in Technical Activites

Overnite-2015 Programming Competition (ACM Certified) My team Heapify were finalist in the onsite round.	2015
Facebook HackerCup Secured a position of 418 in the Round 2, qualified Round 1 with a position of 504	2015
Mozboot Hackathon, Kshitij- IIT Kharagpur Won the hackathon organized by Mozilla by making web game of blackjack. I wrote the entire code in JavaScript.	2014
Google Devfest Competition Made a mathematical android application game of Nim in which I implemented the front end of the application.	2013
IEEE Certified Image Processing Workshop Programmed a Lane Detection Robot to detect path and move accordingly using openCV library in C++. Also, programmed a Shape Detection Robot to identify circle, square, or a triangle.	2013

Skills

Programming Languages : C, C++, MySQL, Java, Python, R, HTML5, CSS, JavaScript
IDE : Eclipse, Netbeans, Android Studio
Platforms : Windows, Linux

Extra Curricular Activities

- Won **Gold Medal** in Karate at Meerut.(**Final Round** of All India Karate Competition, 2001)
- Won **Bronze Medal** in Karate at Mangalore.(**Second Round** of All India Karate Competition, 1999)
- Won **Bronze Medal** in Karate at Kolkata.(**First Round** of All India Karate Competition, 1998)
- Served at National Service Scheme for 2 years, IIT Kharagpur.
- Taught Freshers basics of Programming and Data Structures using C.