

EDUCATION

Kharagpur, IN	Indian Institute of Technology, Kharagpur	2011 – May 2016 (expected)
<ul style="list-style-type: none">• 5 year Integrated MS in Mathematics and Computing, CGPA: 8.50 / 10• Coursework: Algorithms; Object Oriented Design; Database Management Systems; Computer Architecture; Probability and Statistics; Information Retrieval; Artificial Intelligence; Speech and Natural Language Processing• MOOCs: Machine Learning, Neural Networks		

PROJECTS

Predicting Helpfulness of online Product Reviews	Master's Thesis Project, ongoing
<i>Advised by Prof. Pawan Goyal (CSE, IIT Kharagpur) and Prof. Bibhas Adhikari (Mathematics, IIT Kharagpur)</i>	
<ul style="list-style-type: none">• Used a combination of structural and semantic properties of review text such as informativeness, readability, emotions etc. to improve the state of the art methods in predicting helpfulness of online product reviews.• Trained an LSTM based Recurrent Neural Network over word embeddings of reviews to predict helpfulness score.• Paper submitted to EMNLP 2016, Austin, Texas. Technologies used: Python, NLTK, Theano, scikit-learn	
Extracting information and user behavior on Twitter during Disaster events	Fall 2015
<ul style="list-style-type: none">• Developed an SVM based classifier that segregates tweets into situational, opinions, political and relief classes with an 80-85% in-event and 75-80% cross-event accuracy.• Analyzed the tweet patterns and user behavior in multiple languages that led to interesting insights.• Technologies used: Python, Pandas, scikit-learn	
DisCern	Fall 2014
<ul style="list-style-type: none">• Developed a scientific paper search engine to provide a diverse set of results over a collection of 3 million papers.• Performed keyword expansion to ensure that the semantically correlated articles are also included in the results.• Leveraged reinforced random walks on a citation graph to balance prestige and diversity among search results.• Technologies used: Python, JavaScript, Django, NetworkX, Redis	
Autonomous Underwater Vehicles	Spring 2014
<ul style="list-style-type: none">• Built a mission planner for the AUV using hierarchical state machines.• Developed a simulator for the vehicle to rapidly test algorithms on realistic scenarios using a robust physics engine.• Technologies used: Python, C++, ROS	

WORK EXPERIENCE

Python / Django Developer Intern	HackerEarth	Summer 2015
<ul style="list-style-type: none">• Created a problem recommendation engine using an ensemble of collaborative and content-based filtering.• Developed a tool to fill out a user's profile on HackerEarth using his LinkedIn information. Within one month of its launch, over 2300 users and 25% of the new users used this tool to create / update their profiles.• Implemented a service to publish real-time notifications to users across the site using the Pusher API.		
Student Developer	Google Summer of Code	Summer 2014
<p>BRL-CAD : an open-source 3D solid modelling software</p> <ul style="list-style-type: none">• Developed a system that automatically collects logs generated by BRL-CAD Benchmark suite, a set of tests that analyze a given system's performance and provide linearly comparable metrics of overall performance.• Created an online platform for a concise report and comparison of system performance metrics.• Developed an aggregated view of the test results for BRL-CAD core developers.		
Visiting Scholar	Max Planck Institute for Software Systems	Summer 2013
<p>AirCloak: A privacy focused product that provides anonymized user analytics.</p> <ul style="list-style-type: none">• Created a module to provide aggregated location analytics that were anonymized using noise addition & filtering.• Developed a real-time dashboard to monitor key metrics of AirCloak's infrastructure.		

ADDITIONAL EXPERIENCE AND AWARDS

- **Regional Finalist (Dubai) at Hult Prize 2015**, the world's largest student competition for social entrepreneurship.
- **Technology Coordinator** at the **Students' Gymkhana, IIT Kharagpur** for the session 2013-14.
- **Gold, Open Soft** at the **Inter IIT Tech Meet, 2015** for developing an information dissemination app for rural India.
- Recipient of the **INSPIRE** scholarship by the Department of Science and Technology, India from 2012-16.
- Recipient of the **NTSE**(National Talent Search Examination) scholarship by NCERT, India from 2008-11.

LANGUAGES AND TECHNOLOGIES

- **Proficient:** Python, JavaScript, C++, MySQL, Django, Redis, NLTK, scikit-learn, Pandas
- **Familiar:** Java, Lua, HTML, CSS, NodeJS, ReactJS, MongoDB, Kafka, RabbitMQ