(+91) 834-852-2098
ankeshanand1994@gmail.com

ANKESH ANAND

ankeshanand.com
github.com/ankeshanand

EDUCATION

Kharagpur, IN **Indian Institute of Technology, Kharagpur** **2011 – 2016**

- 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**

Advised by Prof. Pawan Goyal (CSE, IIT Kharagpur) and Prof. Bibhas Adhikari (Mathematics, IIT Kharagpur)

- 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**

- 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**

- 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**

- 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**

- 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**

BRL-CAD : an open-source 3D solid modelling software

- 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**

AirCloak: A privacy focused product that provides anonymized user analytics.

- 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