

## Education

- Dec. 2015 **Masters in Computer Science (CQPA : 4.0/4.0)**, *Carnegie Mellon, School of Computer Science, PA.*
- TA for 15-451 - Algorithm Design and Analysis (Spring '15).
  - TA for 10-601 - Introduction to Machine Learning (Fall '15).
- July 2014 **Bachelors in Computer Science (CGPA : 9.07/10)**, *Indian Institute of Technology, Guwahati, India.*

## Experience

- Summer '15 **Software Engineering Intern (Ads Integrity Infra)**, *Facebook, Menlo Park, CA.*
- Developed a tool that extracts **image, text and landing page** features by traversing the DOM structure of an ad preview. The tool has gains over the existing system for 38% of all ad impressions.
  - Worked on the development of a **web crawler** to help automate the DOM Parser pipeline.
  - System is designed to be **scalable** and is run through every ad that goes into Facebook (over a million ads per day).
- Summer '13 **Software Engineering Intern, Amazon Development Centre**, *Hyderabad, India.*
- Developed **Integration Testing Frameworks** for internal team services that automatically run integration tests each time a change is pushed.
  - Used Selenium Webdriver to develop a similar framework for the team's internal website.
- Summer '12 **Intern, International Institute Of Information Technology**, *Hyderabad, India.*
- Worked on the development of **eAgromet** (eagromet.in), an agro-meteorological advisory system being developed by IIIT Hyderabad, ANGRAU and the IMD.
  - Work included the development of a user hierarchy, a user management module, a weather module, advice and bulletin generation module along with a search engine which would search for similar weather patterns.

## Projects

- Feb.2015–  
May.2015 **Robot Restaurant.**
- The setting is a restaurant that is run entirely by automated robots. The goal is to come up with a way for the robots to learn their roles. This is viewed as a multi agent reinforcement learning problem.
  - The world is modeled as an MDP and the 'learning' part is handled using Q-Learning with various reward schemes and learning strategies.
  - The problem of scalability is handled by using the technique of co-ordination graphs.
- Sep.2014–  
Dec.2014 **American Epilepsy Society Seizure Prediction Challenge.**
- This was part of a kaggle competition where the task was to predict the occurrence seizures given iEEG readings from different regions of a patient's brain.
  - Characterized data generated by electrodes using Fourier analysis. Observed correlation between electrodes and their relation with the occurrence of seizures.
  - Applied various Machine Learning algorithms such as Naive Bayes, Regression Trees, SVM, Kernel SVM and Boosting.
- Sep.2014–  
Dec.2014 **Graph Miner.**
- Surveyed and implemented various graphmining algorithms such as Pagerank, K-core decomposition etc..
  - Observed global patterns and anomalies in several real world datasets (from various fields like social networking, online retail, Internet traffic etc..) using the developed package.
- Apr.2013–  
May.2014 **Recommendation System on Mobile Phones (Bachelor Thesis Project).**
- Project aims to build a recommendation system based off a user's mobile activities. Diversity of information obtained from a user's device is what sets it apart from traditional recommendation systems.
  - Phase 1 was spent in building a system to classify a user's activities. A Naive Bayes text classifier with features extracted using Chi Square/Gini coefficients was used.
  - Phase 2 was spent in building a user network where collaborative filtering with weighted similarity scores was used to provide recommendations.
- Dec.2012 **RCPrep.com.**
- RCPrep is a reading comprehension test simulator to help aspirants in crack the Reading Comprehensions section of various exams.
  - The website has received over 300,000 page requests till now and has been on an upward trend since launch.
  - The website was developed using Web2Py and an MVC architecture.

## Computer Skills

- Languages **JAVA, Python, PHP, Hack, JavaScript, Matlab, SQL, C++, C, Bash**
- Technologies **Hadoop, Hive, Spark, Presto, Selenium, HHVM, Django, Web2Py, React, FlowType**