

Work Experience

Data Scientist, Associate TIBCO Software Inc. Mar 2016 - Present

- Lead on development of centralized R framework for advanced analytics and visualization using Machine Learning & Deep Learning algorithms that include data exploration, model building, leveraging TIBCO Spotfire & TERR, model benchmarking and automated deployment.
- Co-developed custom extension on Spotfire tool (C#) with due diligence and led the Beta program. Responsible for testing, documentation, internal and customer enablement, and creating product roadmap.
- Go-to person for prototyping Proof-of-concepts including JavaScript visualizations, integrating Graph database, novel approaches to improve model performance, IronPython scripts and invoking other programming languages from R (Python primarily).
- Spearheaded TIBCO Spotfire Hackathon. Created the main-stage demo for TIBCO Now 2016. Co-Founded Dr. Spotfire webinar series.

Associate Technology Consultant (Professional Services) TIBCO Software Inc. Jun 2015 – Feb 2016

- Worked as onshore developer for prominent Insurance company on the East coast and QA support for financial services firm in San Francisco.
- Communication liaison between client, offshore development team, Tech Lead and Project Manager. Ensured deliverables outperformed SLA guidelines. Standardized the reporting structure thus reducing hand-over time to client by 30% for each sprint.
- Optimized customer record lookup time by implementing Cosine Similarity Ranking (Java) for database outputs prior to hitting Application layer.

Research Intern CARMA International, NYC Feb 2015 – May 2015

- Carma is a media aggregation and news analysis company. Programmed (Java) the Document Clustering pipeline for MongoDB document store.
- Extended the processing capability of Carrot2 Open source libraries from roughly 8,000 JSON documents in one pass upto 20,000 by implementing a unique two-pass algorithm that found the cluster heads and then clustered on those labels and high tf-idf terms.

Other Assistantships

Teaching Assistant, Foundations of CS, NYU School of Engineering Sep 2014 – Dec 2014
 Broke the class curve with a high A grade, compiled content and conducted weekly study sessions for graduate students.

Graduate Assistant Prof. Wong for AI, NYU School of Engineering Sep 2013 – Dec 2013
 Surveyed literature aimed at feature modeling for Hierarchical Face Recognition using Deep Learning. Planned Knowledge transfer for next GA

Research Aide Prof. Roja for Signal Processing, Mumbai University Aug 2011- Apr 2012
 Analyzed pattern recognition techniques applied to Biometrics, Image Preprocessing and Signal processing. Resulted in several publications.

Educational Qualifications

Masters in Computer Science NYU Tandon School of engineering, NY GPA 3.67/4 May 2015

Relevant courses: Design & Analysis of Algorithms, Artificial Intelligence, Machine Learning, Natural Language Processing, Programming Languages

Bachelor of Engineering, Electronics and Telecommunications Mumbai University, India 66.2% (3.71/4) May 2012

Academic Projects

Fanorona Adversarial Game Playing Artificial Intelligence Dec 2014

Codified gameplay (Java) for human vs algorithm on 9x9 board, using AI techniques like recursive Alpha beta pruning and cut-off Inference heuristics such that for suboptimal human player the algorithm has a 100% win rate.

Question Answering System Natural Language Processing Oct 2014

Event based QA system to answer user questions in NYU University Education domain. Project was deployed as Web application (Apache tomcat server) with corpus indexing through Apache Solr (Ruby interface). Responsible for classifying the questions using OpenNlp library and scoring candidate answers using hand-crafted features on a windowing approach to penalize uninformative pages in ranking.

Unlabeled Points to 'k' Lines Clustering Machine Learning Jun 2014

Orchestrated clustering of points to 'k' unknown lines using variant of Expectation Maximization Algorithm (R). Implemented Ada Boosting to increase accuracy even with limited noisy data.

Selected Publications

- Published dissertation 'Smart and Energy-Efficient Home Automation using Gesture Recognition' before IoT was popular in India, under Lambert Academic Publications Germany, 2012. **Available on Amazon**
- First Author for 'A robust, low-cost approach to Face Detection & Face Recognition', CiIT International Journal of Digital Image Processing (IJDIP), 2011. **Impact Factor 0.652**