

Priyank Agrawal

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EDUCATION

MS in Information Systems Engineering

Northeastern University, Boston, MA

Expected Dec 2017

Coursework: Algorithms, Data Science, Machine Learning, Advanced Hadoop MapReduce Programming, Data Warehousing and Business Intelligence, Data Management and Database Design, Web Development Tools and Methods, Web Design and User Experience, Application Engineering and Development (**GPA: 3.49/4.0**) (Secondary: **MS in Data Mining Engineering**)

BE in Computer Engineering

Gujarat Technological University, Vasad, India

July 2009 - June 2013

Coursework: Design and Analysis of Algorithms, Software Engineering, Web Application Development, System Programming, Compiler Design, Advance Java Technology, Distributed Systems, Parallel Processing, Operating Systems

EMPLOYMENT

Software Engineer (full-time internship)

The MathWorks, Natick, MA

Jan 2017 - Present

- Designing and developing a Ruby on Rails application with React front-end that aims to automate various processes for MathWorks' account profiles. The application will be used by more than 100 engineers.
- Engineering a robust data reporting solution that involves querying production data, aggregating it and visualizing in MATLAB.
- Developed an API for the authentication team with a consumable RESTful web-service at back-end and an AngularJS front-end.
- Working in-depth in Software Development Lifecycle and Agile Scrum methodology with strict coding standards and code reviews.
- Built a series of dynamic dashboards and reports for tracking performance and usage metrics using the server log data in Splunk to do real-time analysis. Also, performing aggregations by querying the production data for business insights.

Teaching Assistant

Northeastern University, Boston, MA

May 2017 - Present

- Assisting students in assignments, conducting labs and grading quizzes for Data Warehousing and Business Intelligence course.

Software Engineer

Bharat Naukri, Vadodara, India

June 2014 - May 2015

- Involved in building a J2EE application that is being used by engineers at the firm. Also, performed various data analysis tasks.

Software Engineering Intern

Bharat Naukri, Vadodara, India

June 2012 - May 2013

- Developed an Android application that enables users to book tables and rooms in restaurants and hotels.

ACADEMIC PROJECTS

Machine Learning Python Models (2017) - Implemented linear, multiple, ridge and lasso regression with gradient descent optimization and k-folds cross validation for prediction of house prices. Implemented KNN for document retrieval by calculating similarity using TF-IDF. Implemented transfer learning to extract deep learning features of image-net and trained the KNN image retrieval model. Built a personalized item similarity song recommender and implemented logistic classifier to analyze sentiments.

Restaurant Recommender System (2016) - Implemented MapReduce in Java on Yelp dataset in AWS EC2 instances to build a content based and personalized restaurant recommendation engine and visualized the outcome of the analysis in PowerBI.

Sentiment Analysis with Web Scraper (2016) - Built a web-scraper in R to fetch real time reviews from TripAdvisor and Amazon, and performed tokenization, stemming, lexicon comparison to calculate sentiment score of each review.

Loan Applicant and Life Insurance R Models (2016) - Implemented Naïve Bayesian and Neural Net to classify loan applicants. Also, support vector machines and decision tree regression to predict response for life insurance applicants.

Data Integration and Visualization (2016) - Designed a hybrid dimensional model for Microsoft Contoso DB. Implemented facts, slowly changing dimensions, and performed ETL, data transformation, error handling, source to target mapping. Created Dashboards, charts, slicers, dicers to perform trend, contribution, geographic and correlation analysis in visualization tools using data-warehouse.

Patient HealthCare Provider DB (2016) - Designed a logical data model with 28 entities for healthcare providers storing all patient information and built a J2EE application to show the dynamic crud operations after implementing the data model in a RDBMS.

Other Coursework Projects (2015 - 2016) - An Internet of Things Air Index Calculator using Java Swing, a Job Portal using Spring, Hibernate with crud operations and MySQL data persistence, and Data Integration/Visualization of AdventureWorks DB.

TECHNICAL SKILLS

Languages - Java, JavaScript, Python, R, HTML/CSS, SQL, C/C++, MATLAB

Technologies - Hadoop, MapReduce, Spark, HBase, Pig, Hive, Cassandra, MongoDB, J2EE, Spring, Hibernate, Maven, AngularJS, React, Node.js, Bootstrap, Talend, PowerBI, Tableau, Qlik Sense, SQL Server, MySQL, PostgreSQL, AWS EC2, AWS Lambda

ML Packages - CRAN, Graphlab Create, Numpy, Pandas, Matplotlib, Scikit-learn

CERTIFICATION

Machine Learning Specialization

University of Washington, Seattle, WA

Expected Dec 2017