

RAJAT AGHI

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EDUCATION

Master of Information Management (GPA: 3.9/4.0)

University of Maryland, College Park

Expected May 2018

Bachelor of Engineering in Computer Science (GPA: 3.6/4.0)

Guru Gobind Singh Indraprastha University, India

May 2015

PROFESSIONAL EXPERIENCE

Graduate Assistant

Research Development Office, University of Maryland

Apr 2017 – Present

- Design, develop and maintain research opportunities databases **using PostgreSQL**.
- **Increased efficiency** by writing **Macros in Excel** to automate report generation of grant proposal evaluations.

Data and Technology Intern

USDA – Agricultural Research Service, Beltsville MD

Jun 2017 – Aug 2017

- Compared nutrient compositions on food labels with lab values for food products using various hypothesis testing methods.
- Implemented **regression modeling** to calculate missing nutrient values for food items by correlating them to other foods with similar nutrient composition.
- Coordinated efforts to redesign and update the Dietary Supplement Ingredient Database (DSID) website; worked with **JavaScript** and **PHP** for updating the website. **Presented** functional specifications of the website to technical and non-technical stakeholders.

Business Intelligence Analyst

Aspiring Minds Assessments Ltd., India

Jul 2015 – Jul 2016

- Initiated and managed the sales pipeline of 15+ sales managers in Excel. Applied **regression analysis** to predict manager wise expected revenue.
- Led installation and setup of the CRM for the sales team. Conducted **requirement gathering sessions**, created technical design documents and user manuals. Worked with product and sales teams to automate report generation.
- Analyzed hiring data and generated **business intelligence dashboards** based on client requirements. Helped reduce hiring costs by up to **\$12,000**.
- Formulated a predictive model to suggest the optimal time to air an advertisement for maximizing hits on the website. Leveraged **Google Analytics** to collect website data.

ACADEMIC EXPERIENCE

Analyzing News Sources to Identify Incidences of Collusion

Aug 2017 - Present

- Parsed about 1.2 million articles collected from 4 news sources via the **Diffbot API**. Stemmed and cleaned the data for analysis.
- Applied **n-gram analysis** and **fuzzy matching** to compare articles from different sources. Created Tableau dashboards summarize data and identify trends. **Presented** the analysis to reporters from **Washington Post**.

Identifying Neighborhood Boundaries

Nov 2016 – Jun 2017

- Working in a 3 member team to define neighborhood boundaries for the Washington D.C. area using **urban mobility data**.
- Scraped 5 million records from Car2go and Capital Bikeshare on 2 **AWS** machines via **Pandas** and **BeautifulSoup** in Python.
- Applied DBIndex and **k-means clustering** to devise neighborhoods boundaries for the D.C region.
- **Selected to present** at the pre-conference symposium for International Cartographic Conference 2017 in Washington D.C.

Predicting Consumer Complaints against Financial Institutions

Jan 2017 – May 2017

- Utilized CFPB's consumer complaints data set to develop **statistical models** using neural networks, decision trees and SVMs.
- Trained the models on around 200,000 data points to get prediction accuracy of up to 80%.

Predicting Online News Popularity

Aug 2016 - Dec 2016

- Built a **predictive model** based on Mashable's online news popularity data set to predict number of shares for a given article.
- Achieved accuracy of 87%. Created **dashboards in Tableau** for data visualization and statistical reporting.

TECHNICAL SKILLS

- **Languages:** R, Python (pandas, Scikit-learn, matplotlib), C++, SQL, Hive
- **Databases:** MySQL, PostgreSQL, MongoDB, Hadoop
- **Web Technologies:** PHP, JavaScript, HTML5, CSS3
- **Tools:** Tableau, Excel VBA, Gephi, Google Analytics, AWS, vTiger

ACHIEVEMENTS AND LEADERSHIP

- **Participated in Bitcamp;** Developed a chrome extension in 4 member team that gave a 'fact rating' to news articles. 2017
- **Secured 3rd place in ischool's open data hackathon;** drafted a solution to assign a safety index to travel routes. 2016