RAJAT AGHI

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EDUCATION

Master of Information Management (GPA: **3.9/4.0**) Expected May 2018
University of Maryland, College Park

Coursework – Data Analytics & Visualization, Database Design, Introduction to Data Science, Information Environments

Bachelor of Engineering in Computer Science (GPA: **3.6/4.0**) May 2015
Guru Gobind Singh Indraprastha University, India

PROFESSIONAL EXPERIENCE

Data and Technology Intern Jun 2017 – Aug 2017
USDA – Agricultural Research Service, Beltsville MD

- 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 Jul 2015 – Jul 2016
Aspiring Minds Assessments Ltd., India

- 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. Automated report generation to improve data integrity.
- 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 identify the optimal time to air an advertisement for maximizing hits on the website. Leveraged **Google Analytics** to collect website data.

ACADEMIC EXPERIENCE

Identifying Neighborhood Boundaries Nov 2016 – Present

- 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 **predictive 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%.

Visualizing Washington D.C. Crime Data Mar 2017 - May 2017

- Designed **interactive dashboards** and storyboards in **Tableau** covering over 300,000 crime events occurred over past 8 years.
- Discovered and visualized patterns of crime events by location, day, and time.

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.
- Created dashboards in Tableau for **data visualization and statistical reporting.**

Graduate Assistant Apr 2017 – Present
Research Development Office, University of Maryland

- **Increased efficiency by 90%** by writing **Macros in Excel** to automate report generation of grant proposal evaluations.
- Design, develop and maintain research **databases** using **PostgreSQL**.

TECHNICAL SKILLS

- **Tools:** Tableau, Excel VBA, Gephi, DataWrangler, Google Analytics, vTiger, AWS
- **Web Technologies:** PHP, JavaScript, HTML5, CSS3, WordPress
- **Databases:** MySQL, PostgreSQL, MongoDB
- **Languages:** R, Python, C++, SQL

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