RAJAT AGHI

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EDUCATION

Master of Information Management (GPA: 3.85/4.0)

May 2018

University of Maryland, College Park

Bachelor of Engineering in Computer Science (GPA: 3.5/4.0)

May 2015

Guru Gobind Singh Indraprastha University, India

PROFESSIONAL EXPERIENCE

Business Technology Analyst

July 2018 – Present

Nodal Exchange LLC, Tysons Corner, Virginia

- Added functionality to the test automation suite by writing unit tests and integration tests using TestNG in Java.
- Coordinate across teams to design and support the implementation of new business requirements. Using Jira, Confluence and Bamboo for managing projects.

Data and Technology Intern

June 2017 – Aug 2017

USDA – Agricultural Research Service, Beltsville, Maryland

- Redesigned the <u>dsid website</u> (dietary supplements ingredients database) using PHP at the backend and JavaScript, jQuery, Bootstrap and HTML at the frontend. Used MySQL as the database.
- Implemented regression modeling to calculate missing nutrient values for food items by correlating them to other foods with similar nutrient composition. Implemented the regression equations in PHP and deployed the <u>model on the website</u>.

Business Intelligence Analyst

July 2015 – July 2016

Aspiring Minds Assessments Ltd., India

- Analyzed hiring data extracted from SQL (PostgreSQL) and NoSQL (MongoDB) databases to generate business intelligence dashboards based on client requirements. Helped reduce hiring costs by up to \$12,000.
- Initiated and managed the sales pipeline of 15+ sales managers in Excel. Applied regression analysis to predict manager wise expected revenue.
- 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

Developing Skills for Amazon Alexa

Jan 2018 - May 2018

- Worked in collaboration with the CountyStat department at the Montgomery County to create an Alexa skill which reports crime statistics based on the user's location. Python (Flask-ask library) and AWS Lambda was used for development.
- Used word2vec to create a nlp model to understand what the user says and give information about the relevant service.

Identifying Neighborhood Boundaries

Nov 2016 – May 2017

- Scraped 5 million records from Car2go and Capital Bikeshare on 2 AWS ec2 instances via Pandas and BeautifulSoup in Python. AWS s3 was used for storage. Applied k-means clustering to devise neighborhoods boundaries for the D.C. region.
- Presented results at the pre-conference symposium for the International Cartographic Conference 2017.

Compare News Sources to Identify Incidences of Collusion

Jan 2017 – May 2017

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

TECHNICAL SKILLS

- Programming Languages and Databases: Python, SQL, HTML, PHP, JavaScript, MySQL, MongoDB
- Tools: Tableau, AWS, Jupyter Notebook, Git, Excel VBA, Google Analytics, DataGrip, JIRA, Confluence, Bamboo