RITHIK AGARWAL

Vancouver, BC +1 778-930-4577 ragarwal0201@gmail.com Rihtik Agarwal RithikAgarwal10

Skills

- **Programming Languages:** Python, C#, Javascript, R, SQL, Java, HTML/CSS
- **Framework and Libraries:** Pandas, Pyspark,Numpy, Scikit-learn, Tensorflow, PyTorch, Flask, React.JS,.NET Core, Apache Airflow
- **Tools:** PowerBI, Tableau, Docker, Jupyter,Google Colab, Jira, Postman API, AWS, Azure, GitHub, Bitbucket, Jira
- **Database:** MySQL, PostgreSQL, AWS S3, AWS Redshift, Azure Cosmo DB, Azure Data Warehouse

Technical Experience

BQE Water **May 2023 - Present**

Data Engineer *Vancouver, Canada*

- Developed and deployed advanced **Python** based **ETL scripts**, reducing water quality data processing time by **90%** and significantly enhancing data management efficiency across multiple company sites in the US and Canada.
- Engineered a real-time data collection pipeline using **Python**, deployed on **Docker** containers; ensured robust data management through a scalable and secure **PostgreSQL** infrastructure, reducing processing time by 50%.
- Created **Power BI** based monthly analysis report system leveraging data from multiple sources, transforming data visualization and report engagement, crucial for strategic business decisions.

Honeywell Technology Solutions **Jan 2022 – Aug 2022**

Software Development Intern *Bengaluru, India*

- Crafted an **alert system** for the current building management application using **7 REST-API** which consumed APIs from different SaaS platforms such as **Twilio** and **Forge Notify** using **.NET**
- Designed a **C#** based delivery notification system that dispatched alerts through **E-mail, SMS, WhatsApp, and Web Push Notifications**, leveraging building metrics to boost customer engagement by **25%**.
- Tested and documented the created features and APIs extensively with a combination of **Postman, Swagger, and HTTP unit tests**
- Integrated the built alert features to the current Forge dashboard pipeline to consume the updated metrics and trigger Alerts based on set parameters using **ReactJs** and **NodeJs**

Technical Projects

GoConcert - A concert recommendation system | *Python, AWS S3, Pyspark, Flask | SFU* **Jan 2023 - Apr 2023**

- Built a **Flask** based web application with **HTML**, **Jinja2**, and **CSS** to allow users to input their playlists, view detailed analysis, and receive concert recommendations based on their music preferences.
- Implemented a Spotify API-powered pipeline to extract data from user playlists, then used **pandas** to analyze it using **Matplotlib** and **Seaborn** to visualize the data in various ways.
- Utilized NLP techniques like **Lemmatization** and **Bag of words** with **Random Forest model** with voting ensemble technique to analyze user Spotify playlists and predict preferred music genres.
- Extracted data from over 5,500 playlists and 700,000 songs used **pyspark** to preprocess it and to train ML model to predict the genre of user based on their playlist using **random forest algorithm**, **naive Bayes**, **KNN**

Airbnb Data Insights | *Python, Apache Spark, AWS S3, Tableau | SFU* **Nov 2022-Dec 2022**

- Constructed a data engineering pipeline using **Python**, **Apache Spark**, and **AWS S3** on data scraped from AirBnb to support international students in finding Airbnb accommodations.
- Devised **Apache Spark** methodologies to analyze the proximity of listings to educational institutions, reducing the time required for students to select suitable Airbnb accommodations by **35%**.
- Customized interactive **Tableau** dashboards including curated price and amenity analysis for different cities across Canada to present the analysis in a visual format.

Education

Master's of Science in Professional Computer Science **Sep 2022 - May 2024**

Simon Fraser University, Burnaby, Canada

Bachelor of Technology in Computer & Communication Technology **Jul 2018 - May 2022**

Manipal Institute of Technology, Manipal, India