

# Anuj Saboo

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## SUMMARY

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Meticulous professional with 5 years of industry experience winning 8 performance awards. Passionate about designing data focused solutions using engineering pipelines, analytics, machine learning and natural language processing to generate insights and deliver value to decision makers displaying exemplary technical and leadership skills.

## TECHNICAL SKILLS

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**Languages:** Python, SQL, R, C++, HTML, CSS

**Data Science Frameworks:** Pandas, Scikit-learn, Spark, Airflow, Spacy, NLTK, Pytorch, Dash, Power BI, Tableau

**Proficiency:** Data Engineering, Statistical Analytics, Machine Learning, NLP, Deep Learning, Docker, Azure, AWS

## EXPERIENCE

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### Data Scientist

May 2020 – Present

*Transport Canada*

*Ottawa, Canada*

- Developed ETL processes, cleaning, feature engineering and statistical analysis on transportation accidents to detect patterns and anomalies by applying dimensionality reduction and training clustering models
- Leveraged visualization and communication skills to design dashboards and communicate risk indicators and cluster properties to answer challenging business problems
- Designed an automated NLP workflow to process transport incident emails and developed a web based dashboard that utilized text similarity to detect emerging risks, patterns and predictions
- Developed and deployed a portal on Azure cloud to perform Social Media Analytics on twitter data in real time that helps understand public opinion using Text Classification for Sentiment Analysis, summarize tweets using Named Entity Recognition and analyze topics using Graph Networks
- Developed a mathematical model to estimate activity in Aviation and Trucking modes using U, L and V recovery curves helping the organization react and respond to the PPE demand and expenditure during COVID

### Senior Developer

Mar 2017 – July 2017

*Mu Sigma*

*Bengaluru, India*

- Developed ETL workloads and designed dashboards for reporting customer activity of a digital marketing company
- Formulated the Azure cloud migration strategy and instrumental in optimizing database performance achieving high level of customer satisfaction

### Database Administrator & Solution Designer

Aug 2014 – Mar 2017

*Societe Generale*

*Bengaluru, India*

- Engineered a pipeline for data collection, preprocessing and regression modelling to monitor, measure and report infrastructure resource allocation through analytical dashboards
- Developed a text processing solution to process database and server logs leading to quantification of root causes, analysis of performance bottlenecks and automated service handling
- Spearheaded the design and deployment of hybrid analytical solutions using large scale data infrastructure with SQL and NoSQL data sources being the Subject Matter Expert for leading the project transition from Paris to Bengaluru
- Programmed an in-house end to end data orchestration solution for data replication, reporting and high availability for 180 databases resulting in savings of \$200K per year for the organization

## EDUCATION

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### Simon Fraser University - 4.14/4.33

Burnaby, BC

*Master of Science in Computer Science, Big Data Specialization*

*Sep 2019 – Apr 2021*

### Manipal Institute of Technology - 8.09/10

Manipal, India

*Bachelor of Engineering in Information Technology*

*July 2010 – May 2014*

## CERTIFICATIONS

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- Natural Language Processing Specialization | deeplearning.ai | December 2020
- Advanced SQL Queries | Learning Tree | December 2020
- Analyzing Data with PowerBI | Learning Tree | June 2020

## PROJECTS

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- London Commute Analysis** | *Python, Spark, Kafka, PostgreSQL, TextBlob, Dash* Oct 2019 – Dec 2019
- Developed ETL pipelines and built a UI to analyse performance and safety of London transportation network
  - Utilized geospatial data to create cluster and heatmaps for Geo Analytics of accident hotspots and infrastructure
  - Applied sentiment analysis on twitter feeds to generate insights on customer feedback
- Real Time Speech Activated Assistant** | *Object detection, OpenCV, Speech Processing* Oct 2019 – Dec 2019
- Trained an image classification model and developed an application for object detection through speech processing and translation to classify everyday objects in a live video stream
  - Worked with Google Open Images V4 dataset for training the model and explored creation of a custom dataset using web scraping and bounded box labelling
- Strategic Asset Manager** | *NLP, Stock Prediction, Dashboard, Chatbot* Feb 2020 – Apr 2020
- Parsed edgar reports and applied sentiment analysis to be used as feature in the stock price prediction model
  - Developed the web-based portal with chatbot integration to recommend investment decisions
- Find me Love** | *Recommendation Systems, Correlation, Clustering* Feb 2020 – Apr 2020
- Built a Recommendation System on Libemseti dataset to suggest dating profiles using cold and hot start strategies
  - Applied methodologies of Weighted Average, Pearson Correlation and KNN Clustering to recommend similar profiles to users
- Flight Delay Prediction** | *R, Classification Algorithms, Paramter Hypertuning* Oct 2019 – Dec 2019
- Performed data cleaning, exploratory data analysis and developed a classification model to predict flight delays
  - Evaluated and tuned machine learning models using algorithms such as Logistic Regression and Random Forest reporting causal factors for delays

## EXTRA CURRICULAR

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- Subject Matter Expert at Societe Generale for Automotive Leasing Division
- Director at Manipal Network, a media channel at Manipal University
- Co-Founder at DesiKapde (Apparel brand)