

# Julie Zhuo Yang

Distinguished professional with experience in data analysis, visualization and machine learning. I am passionate about tackling complex challenges, finding computational solutions, and relaying information to broad audiences.

## EXPERIENCE

### Beam Data, Toronto — *Data Science Consultant*

May 2022 - PRESENT

Created a recommendation system utilizing Python, exceeding the client's expectations. Backup, restored and upgraded PostgreSQL databases regularly.

Made successful calls to the Google Analytics API. Designed table schemas and created working dashboards in Metabase using SQL. Generated business insight reports and analyzed SEO performance.

Build automated end-to-end pipeline collecting google ranking data through web-scraping. Adopted Ngram analysis to discover new keywords. Ingested data into Metabase and built interactive dashboards.

Experience working with and building services in AWS S3, EC2, and QuickSight.

### BioBasic, Markham — *Business Analyst*

June 2020 - Mar 2022

Co-developed sales forecasting ML model for estimating future sales to optimize inventory level. Trained and optimized hyperparameters in XGBoost, extra tree regressor and linear model.

Developed use of Power BI Dashboards for business performance reporting of customer service operations, automating weekly sales summary and visualization.

Designed primers and gene amplification reaction process using SnapGene

## PROFILE PROJECT

### Deep learning

Developed a prototype machine learning algorithm to identify various lung cancers across hundreds of CT scan images using FastAI. The algorithm performed with 96% accuracy.

### Big Data

Collected and processed massive tweet data for marketing proposed using Big Data databases such as Scala, Spark, Hadoop and DataBricks. Performed sort, join, aggregations, filter and other transformations in Spark database. Gathered data using Spark Streaming from AWS S3 bucket in near-real-time. Experienced in installing and configuring Hive on the Hadoop cluster.

### Web scraping

Build automated end-to-end pipeline collecting google ranking data through

North York, ON  
Canada  
(647) 949-2566  
j.zhuo.yang@gmail.  
com

## TECHNICAL SKILLS

SAS | SAS SQL | MS  
Python | PostgreSQL  
MySQL | Numpy | Pandas  
Tableau | Power BI  
Machine Learning  
Deep learning  
EMR | Hadoop | Hive  
AWS | EC2 | S3  
Athena | QuickSight  
Spark  
RDD | DataBricks  
Google Analytics  
Certification

## SOFT SKILLS

Self-starter  
Integral  
team-player  
Creative and  
resourceful  
Analytical and  
logical

## LANGUAGES

English, Mandarin

## Hobbies

Health app  
development  
AI Arts  
PADI Certified open  
water scuba diver  
Reading Science  
Fictions

web-scraping. Adopted Ngram analysis to discover new keywords. Ingested data into Metabase and built interactive dashboards.

## Other projects

Data visualization in Tableau|Power BI

Recommendation system

SAS: Performed efficient queries using SAS and SAS SQL to assess, clean, validate and analyze large datasets for reporting and quoting purposes.

[See project links for detail.](#)

<https://drive.google.com/drive/folders/1IsQzOJ-ACJrTG76wVEwNzG9rkurLAo8X?usp=sharing> OR

<https://github.com/zyangjulie/profile-projects.git>

## EDUCATION

### **Queen's University, Kingston — *Master of Medical Sciences***

Jan 2018 - Dec 2019

Strongly focused on medical information technology, health research methodology, statistics, project management principles and data management

### **University of Waterloo, Waterloo — *Science and Business with Co-op***

Sep 2010 - May 2015

One-of-a-kind degree that equipped learners with both scientific know-how and valuable business skills.