

# PRATISH DULLABH

[Pdullabh315@gmail.com](mailto:Pdullabh315@gmail.com)

(+27) 71 683 3908

My website: [https://pratish315.github.io/my\\_website/](https://pratish315.github.io/my_website/)

GitHub: <https://github.com/Pratish315>

## Executive Summary

Pratish is a Machine Learning Engineer with a passion for learning and building strong relationships with colleagues. Pratish thrives in fast-paced environments and enjoys quality time with family and friends. Pratish's hobbies include gym workouts, gourmet cuisine, soccer/cricket, gaming, and traveling. Pratish is excited about coding and constantly seeks opportunities to enhance his technical skills.

- Overall 3+ years' experience in Big Data, Data Science, Software Engineering, Data Engineering and Dev-Ops
- Technical experience in Terraform, Azure DevOps, Bitbucket, AWS, Spark, Airflow, MLflow, Talend, Control-M
- Actively liaison between business stakeholders and technology teams to successfully implement solutions
- Hardworking individual with good written and verbal interpersonal skills to deliver value
- A resilient, determined, and enthusiastic problem solver

## Education

[University of Cape Town \(Cape Town, South Africa, February 2016 – February 2020\):](#)

- Honours in B.Sc. Computer Science, GPA: 77
- B.Sc. Computer Science and Business Computing

[Fairbairn College \(Cape Town, South Africa, February 2011 – November 2015\)](#)

## Work Experience

[Machine Learning Engineer, Shoprite Holdings \(Cape Town, South Africa: Aug. 01, 2022 – Present\)](#)

- My daily duties involve ensuring that all ML models are scalable, cost-effective, accurate, tracked, highly automated and that the value derived from them lands in the hands of the customer.
- I Integrated the data from our personalisation engine (billions of records) into the company's ERP system which enabled personalised communications through various channels. To achieve a scalable solution, I used spark and called an API concurrently through a pandasUDF function for batches of customers.
- I played a pivotal role in developing our team's own set of Python utilities to interact with Airflow, MLflow, and various AWS services which are used for taking products to production.
- I created CI/CD pipelines for various projects. This includes the necessary pre-commit and code testing checks, constructing build and release pipelines to deploy code and optimal infrastructure to different environments. This included end-to-end and scalability testing with job monitoring in place.

[Data Scientist, Shoprite Holdings \(Cape Town, South Africa: Jan. 01, 2021 – Present\)](#)

- I played a crucial role in the development of collaborative-filtering, segmentation and customer churn models. Business was pleased with the results, and they are used as an input for personalized deals sent to customers.
- Furthermore, I served as a core developer in the creation of our company's personalisation engine, enhancing the customer experience and driving revenue growth. I was responsible for the job architecture, scalability, infrastructure and the build logic.

### Data Science Intern, Shoprite Holdings (Cape Town, South Africa: Feb. 03, 2020 – Dec. 31, 2020)

- During my data science internship, I excelled in a Machine Learning competition, securing 1st place by accurately predicting product demand across multiple stores. This experience showcased my skills in data analysis and modeling.
- I gained valuable insights into different teams' processes and objectives, actively contributing to various projects. Collaborating with colleagues provided me with hands-on experience, further strengthening my expertise in the field.

## Extracurricular Activities

### Class Representative (University of Cape Town: June 2017 – November 2017)

- I created a communication channel between lecturers and students, scheduled exam dates, and dealt with student queries.

## Academic Projects

### AutoStar: SEMI-AUTOMATED DATA WAREHOUSE CONSTRUCTION

- This was my Honours project; I worked in a team of 2 and I was responsible for semi-automatically generating a star-schema from relational and NoSQL databases.
- I used Java, defined the ETL process and scripted the data pipeline from the source databases to the warehouse containing the generated star-schema.

### Bid4Cows: an auctioning web application

- I worked in a team of 3, I was responsible for building and testing the backend. The tools I used were Java, JSP, JDBC and SQL.

### Survival: a 2D 1-Player game + Tetris

- I created my own top-down shooter game and Tetris from scratch using Java and LibGDX.
- For the top-down shooter game I added in basic AI using A\* pathfinding.

## Hard Skills

Java Python C# SQL UNIX Haskell HTML CSS JavaScript React NodeJS JSP Hive Hadoop  
Spark Docker Kubernetes LibGDX Machine-learning Databases Data Science Big Data &  
Analytics Data Engineering Dev-Ops System Integrations Software Engineering Cloud  
Engineering Terraform

## Languages & Soft Skills

English Afrikaans Problem-solving Accountability Leadership Enthusiasm Diligence Learner  
Futuristic Achiever Discipline Responsibility Consistency Positivity Adaptability  
Communication  
Stakeholder Management Planning Reliability Flexible