## PRAKRUTHI NATARAJU GOWDA

1/1A Glenroy Road, Hawthorn, Victoria 3122 +61 0498 263 665 | Prakruthi.natraj333@gmail.com | www.linkedin.com/in/prakruthigowda

## **WORK EXPERIENCE & PROJECTS**

## **Data Scientist Intern | Yarra Valley Water**

Nov 2019 to Mar 2020

Yarra Valley Water provides essential water supply and sanitation services to over 1.7 million people who live and work in the northern and eastern suburbs of Melbourne.

- Liaise with Analytics and Engineering to propose, plan, execute and communicate hypothesis-driven analytics projects leveraging Yarra Valley's massive amount of both structured and unstructured data.
- Provide analytics insights and requirements towards potential improvements, product and service innovation
- Develop, deploy and maintain software code and pipelines for data analysis
- Contribute and consult on design, implementation and use of database/cloud storage
  platforms and visualisation tools for data, statistics and other information for reporting,
  trending and troubleshooting
- Supporting business needs for analysis and data visualisation as required.
- Preparation of technical and research reports as required

## **Project Work | RMIT University**

## EY Next Wave Data Science Competition 2019: Mobile Path Prediction

The aim was to classify which mobile trajectories would enter the city's centre at a particular period of time at a selected area. Two methods were performed to tackle this competition.

- Method 1: Keras & Tensorflow RStudio server model running on an AWS EC2 instance.
- Method 2: XGBOOST in R model running locally. Both models performed well.
   However, XGBOOST was the most efficient to use due to server costs.
- In the process of creating this model, a lot of data wrangling was involved.
- This included: **Preprocessing** data Detecting outliers & cleaning data Normalisation & balancing in datasets Clustering.
- Finally, the model was tuned using **Bayesian optimization** before training and evaluating results. This model ranked me in the top 10% of 2300+ global participants.

## Developed Shiny app data visualisation for analyzing annual road deaths in Victoria.

- The shiny app developed shows monthly or yearly statistics over a period of 10 years in the graph.
- The interactive app also provides details on the total number of people involved in accidents, fatality and gender-wise death in the graph.
- https://prakgowda.shinyapps.io/Assign 3/

# Proposed Digital Strategy for News Corp Australia on using artificial intelligence in news media.

- Developed an AI system that could analyse and collect information across the internet including public websites.
- Al collected audience's information through their profile, sent cookies to audiences to track their activities and recommended similar news articles relating to their interests.
- Developed data mining function to trace internet user's browsing history, the content
  of search and interactions on social media. Gathering statistics of each published
  article, posts, blogs and comments in numbers and percentages.

# Used ArcGIS software to create, translate, and integrate GIS data layers and digitize new data.

- Implemented GIS data processing functions as per established standards.
- Designed pipeline routes, maps, models and exhibit maps.
- Provided support to database processes and utilized queries and GIS tools.
- Analyzed spatial data sources and generated map products.

## Scientist Trainee | Anthem Biosciences Pvt. Bengaluru

Jan 2017 - Dec 2017

- Designing and implementing research studies.
- Performing analysis on raw materials, intermediates, standards and finished products.
- Provide advice to laboratory staff and clients on a broad range of issues pertaining to service delivery and improvement opportunities for Anthem Biosciences.
- Provide scientific services of a complex nature to ensure the maintenance of professional clinical standards and established principles/procedures.
- Calculating results and reporting of data, including trend analysis as required.

## Application Specialist | Orbit Science Bengaluru

June 2016 - Dec 2016

- Was in-charge of key accounts, channel sales and marketing.
- Built strong and lasting bonds with high profile clients such as Honeywell, Sigma and Qiagen.
- Met multiple sales, marketing and AR collection targets consistently.

## ADDITIONAL EXPERIENCE

## Hair Salon Assistance | Shibui South Yarra

Oct 2018 - Present

 Demonstrated a friendly, customer-focused attitude with the ability to work in a fast-paced environment

#### **EDUCATION**

RMIT University - Master of Analytics

2020

Sri Jayachamarajendra College of Engineering - Bachelor of Biotechnological Engineering

2016

## LANGUAGES & FRAMEWORKS

#### **Programming**

• Python • R • BigQuery • SQL • Java • C • SAS • ArcGIS

## **Data Visualisation and Reporting Tools**

• Power BI • Tableau • Plot.ly • Shiny

#### **Machine Learning Techniques**

· Classification · Clustering · Regression · Linear Classifier · Neural Networks Deep Learning

## **Statistical Analysis Techniques**

- Time series analysis Hypothesis Testing based on p-value and Confidence Interval Chi-Square Test of Association Chi-Square Goodness of Fit Test Correlation Analysis Stochastic Process •
- Econometric Techniques
   GIS Fundamentals

## **VOLUNTEERING, CLUBS AND SOCIETIES**

## Student Learning Advisor Mentor | RMIT

Jul 2019 to Present

Mentoring students having difficulty in: Database Concepts, Regression Analysis, Multivariate Analysis, Introduction to statistical computing, Data Preprocessing.

## Volunteer | RUSU - RMIT University Student Union

Jan 2019 to Present

Helped new students either international or local with their course structures, accommodation, part-time jobs tips and moral support.

Volunteered as Teacher at Just Teach (Non-Profit Organisation) | Mysore Jun 2012 to Dec 2015 Tutored English, Mathematics and Sciences to underprivileged children. Organised various events for children on several occasions.

## **REFERENCES**

Brent Barber | Senior cutter at Shibuil (03) 9820 9130

Pallavi Babu | Asset Systems Specialist at Yarra Valley | +61 450 495 309

Jaarad Legg | Contract Manager at Yarra Valley | +61 419188442

Arun Kumar | Asset Systems Specialist at Yarra Valley | +61 469 721 006

Vinh Loi (Liam) Chau | Data Scientist at ANZ | +61 45 222 7405

Harri Somakanthan | Bose Brand Ambassador at Crossmark | +61 413 895 986