

CUSTOMER INSIGHT · BUSINESS ANAL MACHINE LEARNING · DATA PRODUCTS · R · SQL

Competent Analytics Professional, Consultant and Data Manager with experience in Team Leadership," Project Management and Customer Analytics, sound working knowledge of various Statistical and Machine ". Learning techniques and an insatiable curiosity about how to use data to inform business decisions



# Skills

Working knowledge of Statistical and Machine Learning techniques, including Customer Segmentation and Targeting, Attribution Modelling, Time Series Analysis and Demand Forecasting, Social Sentiment Analysis, A/B Testing, Customer Acquisition and Retention, Marketing Response Modelling, Budget Optimisation, Customer Lifetime Value, Propensity modelling, Data Visualisation and Dash-boarding, Market Basket Analysis, Recommender Systems | Analytics and Insight Generation | Team Leadership and Coaching | Project and Stakeholder Management | Marketing Analytics and Business Intelligence | Wrangle large structured and unstructured data with R and SQL | Basic Python, VBA, Tableau

# Professional Experience

**Self-employed** London, UK

CUSTOMER INSIGHT AND MARKETING ANALYTICS CONSULTANT

Jul-18 – Present

- Creating own webpage to showcase projects and articles www.diegousai.io
- Working on Customer Insight, Business Intelligence and Marketing Analytics projects
- Publishing technical articles on several Online Publications and Blogs

#### Various Medium Publications - Towards Data Science / The Startup / Analytics Vidhya

Online

FREELANCE TECHNICAL WRITER

Mar-19 - Present

 Publishing articles covering topics in Machine Learning, Business Intelligence, Customer Behaviour and Insight, Data Collection and Wrangling, Segmentation and Cluster Analysis, and more to come!

**Ebiquity plc** London, UK

DIGITAL DATA MANAGER

Feb-17 - Jun-18

- · Lead and mentor a team of 3 Data Analysts to deliver ad-hoc modelling as well as more holistic analytic projects
- Use a combination or R and SQL to collect, cleanse and maintain data from various sources (Ad Server, Third-party Verification, Google Analytics, Shareablee Analytics, etc) to analyse and present to automotive, banking and e-commerce clients
- · Develop and maintain R Shiny dashboards to visualise large amount of sales and online marketing data and conduct regular market trend analysis
- Use Structural Equation Modelling in R for Social Sentiment Analysis to assess impact of Paid, Owned and Earned media mix on social consumer sentiment for Subway restaurants chain, resulting in a 7% improvement in overall budget allocation

**Ebiquity plc** London, UK

SENIOR ANALYTICS CONSULTANT

Apr-13 – Jan-17

- · Lead consultant across national and international clients, working collaboratively with stakeholders to understand issues, translate them into insight briefs, and use results to shape strategy
- · Work with RIAS Insurance stakeholders across several business units to identify business relevant customer segments, carry out time series analysis to understand key drivers of customer acquisition and retention for each segment, and use learnings to inform future strategies
- · Use SQL and R to collect and compile structured and unstructured data from various sources to run bespoke analysis and generate insight
- Run media budget portfolio optimisation and what-if scenarios to produce KPI forecasts based on optimum marketing budget allocation average ROI lift of 5% to 25%
- · Work with stakeholders to design, execute and analyse results of several online and offline media testing to answer clients' specific questions

**Neustar MarketShare** London, UK

MARKETING SCIENTIST Feb-13 - Mar-13

• Develop estimation algorithms for market response models to implement in MarketShare proprietary modelling and optimisation platforms

CONSULTANT ANALYST

**Annalect** 

London, UK Feb-12 - Jan-13

· Lead consultant responsible for scoping out, setting up and delivering a brand new marketing response offering for Sainsbury's retail, leading to a 5% overall ROI boost

· Contributing author to the Silver Award Winning IPA 2012 Effectiveness Paper "Waitrose: The best ever Christmas"

**Havas Media Group** London, UK

ANALYTICS DIRECTOR Sep-10 - Jan-12

· Conduct time series analyses to understand role of key business drivers for national and international clients in transport, retail and hospitality

Publicis Groupe London, UK

SENIOR ANALYST Aug-08 – Aug-10

 Construct econometric models to understand the influence of advertising and marketing on consumer behaviour and assess efficiency of media communication strategies

Gain Theory London, UK

ANALYST

Apr-06 – Jul-08

Building bespoke marketing mix models to measure the sales effectiveness of media and marketing activities, gaining understanding of brand
performance and quantify ROIs for financial, telecommunication, and e-commerce clients

Various Companies London, UK

VARIOUS ROLES

Mar-01 - Mar-06

Non-analytical roles

# **Education**

#### **Business Science University**

Online

BUSINESS ANALYSIS WITH R (101-R)

2018 - 2019

A 7-week data science for business course focused on clean, join, manipulate and visualise data with the Tidyverse suite and the Recipes
package, modelling with Parsnip and reporting with RMarkdown

## **Business Science University**

Online

DATA SCIENCE FOR BUSINESS (201-R)

2018 - 2019

- · A 10-week data science for business course focused on solving a real-world churn / binary classification problem
- Modelling and performance analysis with H2O AutoML and LIME, link Machine Learning to Expected Financial Performance and develop a recommendation algorithm from scratch

# The Johns Hopkins University

Online

DATA SCIENCE SPECIALISATION VIA COURSERA

2016 - 2017

- I've taken a number of units from this 10-course programme, which covers the data science process from data collection to the production of data science products with emphasis on big-data analysis
- Courses taken: R Programming, Getting and Cleaning Data, Exploratory Data Analysis, Reproducible Research, Statistical Inference, Practical Machine Learning, Developing Data Products

Mango Solutions London, UK

DATA SCIENCE TRAINING

2015 - 2015

- 5-day Data Science Training focused on R and the RStudio IDE
- Topics covered: Syntax and use of the R language, data objects, R functions and how to write your own R functions, import and manupulate data with dplyr and tidyr, graphical representation with ggplot2, overview of several statistical methods, R Markdown to create dynamic documents, R Shiny to create interactive web applications

## Università degli Studi di Cagliari

Cagliari, Italy

LAUREA IN ECONOMICS AND STATISTICS, 1:1 HONOURS DEGREE EQUIV.

1994 – 2000

- · Part Time, specialised in Time Series Econometrics and Forecasting
- · Modules including Microeconomics, Macroeconomics, Statistics, Econometrics, Game Theory, Industrial Organisation
- Dissertation "Non-linear Econometric Models: an Application to Modelling and Forecasting GDP"

# **Selected Projects**

# **Market Basket Analysis**

LINK TO PROJECT

WINTER 2019

- Second of a three part Market Basket Analysis
- Part 1: explore and cleanse a dataset suitable for modelling with recommendation algorithms
- Part 2: fit various Product Recommendation models with the recommenderlab R package and select the best performing model
- Part 3: implement the best performing model in a Shiny Web Application

## K-Mean Clustering for Customer Segmentation

LINK TO PROJECT

SPRING 2019

- · I use K-Means clustering algorithm to segment customers based on their response to marketing campaigns
- Data includes sales promotion for a fictional wine retailer (including wine variety, minimum purchase quantity, percentage discount, and country of origin) and information on customers and the promotions they responded to

## Modelling with Tidymodels and Parsnip - A Tidy Approach to a Classification Problem

LINK TO PROJECT

SUMMER 2019

- In this project I use R tidymodels to create and execute a "tidy" modelling workflow to tackle a classification problem
- · I fit a simple logistic regression in R's glm to switch to a cross-validated random forest with ranger by changing only a few lines of code