

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



### Ski**lls**

TECHNIQUES - Digital Attribution Modelling, NLP/Text Analysis, Market Basket Analysis, Structural Equation Modelling, A/B Testing, Customer Segmentation and Targeting, Marketing Response Modelling, KPIs Optimisation, Statistical Learning, Machine Learning, Time Series Analysis, Demand Forecasting, Propensity Modelling | WEB APPS / DATA VISUALISATION - Google Analytics, Shiny, FlexDashboard, Tableau, PowerBI | TOOLS - R, MS SQL, PostgreSQL, H2O, GitHub, TensorFlow, AWS, Python (Basic) , MongoDB (Basic) | SOFT SKILLS - Team Leadership and Coaching, Project and Stakeholder Management, Analytics and Insight Generation

# Professional Experience \_\_\_\_\_

Reach plc London, UK

MARKETING ANALYTICS LEAD

Aug-20 - Present

- Responsible for providing advanced marketing, advertising technology and customer analytical expertise to ensure that the organisation can derive competitive advantage from data on its customers, and help guide strategic direction
- · Develop strategic partnerships with advertisers to demonstrate ROMI at Reach level, increasing our accountability and strengthening clients' relationships
- · Strategic and hands-on support for new products-services (OK! Beauty Box, Energy Switch Partnership, Team Dog) Identify correct audience, agree analysis objectives and outcomes with stakeholders, manage all data feeds (with R, SQL, Google Analytics), build-update advertising attribution models (in R) and align results with pricing-promotions to achieve weekly-monthly-quarterly revenue targets, evaluate effectiveness of churn prevention initiatives with A/B testing programme
- · Ad-hoc support for new products-services with web analyst: investigate user online behaviour to optimise convention funnel and streamline sign-up process - with finance: assist revenue forecasting with estimates for price elasticity, optimal discount rates, churn rate

Self-employed London, UK

CUSTOMER INSIGHT AND MARKETING ANALYTICS CONSULTANT

Jul-18 - Jul-20

• Working on Customer Insight, Business Intelligence and Marketing Analytics projects

### Towards Data Science / The Startup / Analytics Vidhya / Data Driven Investor

Online

FREELANCE CONTRIBUTING WRITER

Mar-19 - Present

• Contributor to several online publications and blogs - Covering topics in Cluster Analysis for Customer Segmentation, Optimisation, Propensity Modelling, Time Series Machine Learning Analysis, Demand Forecasting, Market Basket 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 analysis as well as more holistic customer segmentation projects
- Use a combination of R and SQL to gather, cleanse and reconcile data from various sources (Ad Server, Third-party Verification, Google Analytics, Shareablee Analytics, etc) to support customer-level analysis, reporting and tracking, and help clients identify new opportunities
- Develop and maintain R Shiny dashboards to visualise to monitor clients KPIs 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, conduct in-depth analysis, and use results to shape strategy
- · Work with RIAS Insurance stakeholders across several business units to identify business relevant customer segments, carry out analysis to understand and improve customer acquisition, value management and retention, and generate cross sell and up-sell opportunities
- 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

Feb-13 - Mar-13 MARKETING SCIENTIST

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

Annalect London, UK

CONSULTANT ANALYST 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 response models to gauge influence of advertising on consumer behaviour and assess efficiency of communication strategies

Gain Theory London, UK

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-01

• Non-analytical roles

### **Education**

#### **Business Science University**

Online

APPLIED DATA SCIENCE AND MACHINE LEARNING FOR BUSINESS

2018 - 2022

- Project-based online learning with a strong focus on Applied Business Analytics, combining course work with end-to-end Data Science Projects
  to develop a comprehensive skills set that blends Applied Analytics, advanced Machine Learning and Business Consulting
- With a road map shaped by the 80/20 Pareto principle, you acquire working knowledge of platforms, skills and technologies that enable to answer complex questions, fast!

#### The Johns Hopkins University

Online

DATA SCIENCE SPECIALISATION VIA COURSERA

2016 - 2017

• Selected units taken from this 10-course programme - 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

## Università degli Studi di Cagliari

Cagliari, Italy

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

1995 – 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

• Multi-Parted Project - 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 - Part 3: select best performing model to implement a Shiny Web Application

### **Time Series Machine Learning Analysis and Demand Forecasting**

LINK TO PROJECT

AUTUMN 2019

- Build a time series machine learning pipeline and generate a weekly revenue forecast
- Carry out an exploratory time series analysis with TSstudio and use insight to create a number of predictors. Then train and validate an array of machine learning models with H2O and compare models' accuracy using performance metrics and actual vs predicted plots

#### Propensity Modelling to Estimate Likelihood to Purchase a Financial Product

LINK TO PROJECT

SPRING 2020

• Multi-Parted Project - Part 1: use results and insights from extensive data exploration to prepare data for analysis - Part 2: estimate several models and assess performance with model-agnostic methodology that enables to compare "glass-box" and "black-box" models - Part 3: fit one final model combining findings from exploratory analysis and insight from models' selection and use it to run a revenue optimisation