

## Professional profile

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15-year experience manipulating data and transforming it into meaningful information to the business. Creator of profitable data-based products that exceed customer's or stakeholder's requirements and expectations. Successful in the application of statistical methodologies and machine learning to business processes. Also a manager that can lead any team to achieve the defined goals successfully.

Proficient on using:

- **SPSS, Python (SciKit Learn, Pandas, SpaCy), R**
- Qlikview, QlikSense, Tableau, Microstrategy, KNIME, PowerBI, Reporting Services (SSRS), **R Shiny, Flask/Bokeh**
- **SQL**, MySQL, AWS Redshift, Postgres, Oracle, Salesforce, DB2 and Other cloud sources (APIs), PySpark
- **AWS**, EMR, Docker, GeoTools

## Career summary

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**Jan 2021 - Present**

**AstraZeneca, Cambridge, UK**

**Team Lead, Analytics Data Preparation**

### *Outline*

Director-level role and part of the Data Office, hands-on and leading a team that mainly performs data preparation.

### *Key Responsibilities*

- Grow the team from 1 to 11 FTE to integrate team growth plans (Tiger Teams)
- Establish team ways of working (JIRA, Github)
- Develop working processes with other departments
- Be the Data Office technical leads on programming (R, Python), AWS and other computing environments (i.e. implement EMR clusters and query using PySpark)
- Perform data transformation to deliver clinical studies (and other data) to our customers in the environments that they use
- Prepare and mentor the team to be Data Science savvy to meet customer requirements
- Manage the team to achieve our scorecard and other internal objectives
- Lead and execute Oncology data preparation

### *Key Achievements/Projects*

- Creation of Tiger Teams that integrate directly with BioPharma Data Scientists
- 80% FTE hired (100% by end of year)

**Jan 2020 – Dec 2020**

**Credit Spring, London, UK**

**Chief Data Officer / Head of Data Science**

### *Outline*

As a member of the board, reporting to the CEO, my mission is to build a Data/Data Science practice from scratch, defining the data strategy and vision for the company.

### *Key Responsibilities*

- Building data science models for underwriting, marketing (churn/attribution), financial forecasting, segmentation, etc.

- Identifying new and innovative features that can be incorporated into the models, while using Machine Learning algorithms that need to be unbiased and explainable
- Defining key metrics that support the business and are also used for investors information
- Creating live dashboards and other visualisations that support the different tribes
- Building and mentoring a team of data analysts & scientists, aligning the tribe with global OKRs

#### *Key Achievements/Projects*

- Created 100% Open Banking Predictive model
- Company-wide Data Platform delivered

**Sep 2018 - Jan 2020**

**Lloyds Banking Group, London, UK**  
**Data Science and Visualisation Manager**

#### *Outline*

Leading the data scientists' team in London to develop innovative tools that will shape the future of the Risk division and the Bank itself.

#### *Key Responsibilities*

- Manage a team of **Data Scientists** within Risk Innovation division
- Mentor and support Senior and Junior Data Scientists
- Develop data science products that fit the needs of internal stakeholders
- Showcase Risk Innovation work in conferences and summits (external and internal)
- Use visualization frameworks (d3/bokeh/Tableau/SAS VA) to build dashboards that can display our machine learning capabilities
- Use machine learning (R/Python) to develop predictive models
- Use of agile methodologies and promote the adoption of Confluence/JIRA across the team, along with Git Hub for version control and collaboration.

#### *Key Achievements/Projects*

- Natural Language processing tools embedded into python flask applications
- Predictive modeling mostly applied to fraud detection cases and credit risk scoring

**Oct 2015 – Sep 2018**

**The Stars Group, London, UK**  
**Senior Statistical Analyst**

#### *Outline*

Data provider and statistical analyst to multiple stakeholders on the business, while managing **Data Science projects**.

#### *Key Responsibilities*

- Work with stakeholders and product managers to create reports and provide necessary data
- Identify appropriate data points, collect data from multiple systems, analyse data integrity
- Querying **BigData** databases to retrieve historical poker hands data
- Determining risk of abuse prediction modeling and player segmentation
- Make dashboards and present findings using Tableau, SSRS, MicroStrategy or QlikSense
- Use Statistical tools/packages (**R, KNIME, Python**) and **Machine Learning** algorithms in special projects across the business and **AB testing**

#### *Key Achievements/Projects*

- Predicted players' next deposit (**Auto Regression Time Series** based model) used to determine adequate promotions for players
- Fraud system scorecard implementation (impact analysis and optimization of the rule based algorithm – benchmark against **Gradient Boosting** model)
- Centralised reporting system with KPI for Support (Agents, Managers and Directors)

**May 2015 – Sep 2015**

**Aegate, London, UK  
European Director of Analytics**

*Outline*

Reporting to the Chief Sales Officer, my responsibility was to lead an advanced analytics team and deliver new data-based products across European countries. Applying **Machine Learning techniques like Clustering and Neural Networks** - the goal was to segment pharmacies and predict sales on unknown regions, cross referencing with geographical data.

*Key Responsibilities*

- **Managing a team** of analysts and data scientists
- Provide analytical solutions to all European countries
- Contact software and data vendors, conducting cost-benefit analysis for **acquiring and integrating third-party solutions**
- Create Aegate Academy that provides analytical training across Europe
- Design and maintain a Qlik Analytics Platform for syndicated products
- Responsible for merging all information that can be used commercially

*Key Achievements/Projects*

- Recruited a team of Data Scientists that generated value to the business
- Built a reporting platform from the ground up (**integrating Qlikview/Sense, AWS Redshift, R and Python**)

**Aug 2014 – May 2015**

**Data Technology, London, UK  
Senior Consultant**

*Outline*

Provide consultancy services to top companies in the UK (e.g. PWC, Qliktech, Prudential), across all sectors. This included server configuration and security settings, building **complex data models** (performance, benchmarking, funds/portfolio, logistics), implement BI best practices and also providing training to developers.

**Nov 2013 – Nov 2014**

**Janssen - Pharmaceutical Companies of Johnson and, Rouen, FR  
Senior BI Consultant EMEA**

*Outline*

My mission was to design new QlikView dashboards (some new, others based on old Cognos legacy). From business requirements I created **advanced metrics and complex data models**. Qlikview scripting to make ETL **automated** processes on **big datasets** was also part of the daily work, from development to **production**.

**Mar 2013 – Nov 2013**

**Consumer Intelligence, Bristol, UK  
Lead Analyst**

*Outline*

Analyst for the recently created Banking and Viewsbank (website) divisions. Designed the first banking solution of the company, **analysing FOREX market** and fees charged by the trading companies/banks. All the statistical reports to surveys were automated to be delivered to PR agencies using **Python** and QlikView.

**2007 Nov – 2013 Feb**

**Cegedim (now IQVIA), Lisbon, PT  
Senior Consultant and Data Innovation Manager**

*Outline*

**Managing a team** of 3 analysts we delivered data projects in the field of market research and pharmaceutical consulting. Responsible for developing new business methodologies and internal tools to improve efficiency. Successfully generated new revenue stream by applying **Artificial Neural Networks** to a disrupting market innovative **Deep Learning based Segmentation**. Taking

advantage of multiple data sources to create Qlikview and Tableau dashboards and using **ARIMA models** to predict sales.

**Mar 2006 – Oct 2007**                      **INFARMED, Lisbon**  
**Health Economist**

## Education & qualifications

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- **Advanced SSRS** – Wise Owl – 2016
- **Multilevel Data Analysis with R** – Centre for Applied Statistics Courses/UCL (London) – 2016
- **Qlikview Developer and Design** – CEGEDIM European Data Processing Centre (Warsaw) – 2009
- **Master of Science in Management (Health)** – INDEG / Instituto Superior de Ciências do Trabalho e da Empresa – 2008  
(Thesis on the efficiency of Portuguese pharmacies using Data Envelopment Analysis)
- **Licentiate Degree in Economics (4yr Bachelors)** – Instituto Superior de Ciências do Trabalho e da Empresa – 2005

## References available on request

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