

Profile: I analyze data, quantify what is known and deliver insights into that which is unknown..

Experience

- Feb 2015 - present **Vodafone Procurement Company, Energy Analyst.**
- Led a data process improvement initiative which reduced operational load on the Category Managers.
 - Developed Proof of Concept Forecasting tool to enhance visibility of energy prices.
 - Represented the Energy team in a Contract Management Working Group
 - Streamlined Historical Volatility calculation for Risk analysis in Energy procurement
 - Operational support and technical analysis on specifications of new Software tools such as an Energy Data Visualization tool.
 - Promoted from a short term contract to a permanent role in April 2015
- July 2014 - January 2015 **A-Syst SA, Data Analyst, 6 month contract.**
- Lead Data Analyst and Analytics Product Architect on a Data intensive Software Product for Turbulence prediction, working as part of a team of 5. This project was shortlisted for an award.
 - Developed a 'Data Strategy Roadmap'. Presenting the results to senior management and the directors.
 - Constructing and evaluating predictive models of airline delays using Random Forests, Logistic Regression, Support Vector Machines.
 - Coordination with SDEs to implement complex models at production scale
 - Taught good data science processes to SDEs, Managers and Senior Managers
 - ETL with large amounts of data from diverse sources including Pig, Oracle, PostgreSQL, and APIs
 - Sentiment analysis of Twitter data using text-mining and showcasing results using D3.js
- March - May 2014 **TriFinance, Freelance Data Science Consultant.**
- Developed a basket analysis model and survival analysis that could increase sales of one product group by 20% yoy using R and SQL
 - Coordination with other analysts and engineers to achieve project delivery.
 - ETL with large amounts of data from diverse sources including MySQL and APIs.
- July 2013 - January 2014 **Amazon EU Sarl, Data Analyst Intern, 6 Month Contract.**
- Lead and developed an email reporting tool in the Supply Chain Execution team, saving 5 hours per week on support tasks.
 - Produced an analytics roadmap to enhance standardisation in metrics reporting and data analytics tooling.
 - Taught statistical inference and hypothesis testing to internal stakeholders.
 - Visualizing results of analysis and helping to construct reporting for non-experts using R, ggplot, matplotlib, Tableau and Django
- Summer 2012 **Data Science Intern, <http://import.io>, London.**
- Worked as part of a Data team at an award-winning startup
- Worked as part of a Data team on Data problems learning the importance of good data integrity and an appreciation of the complexity of business data.
 - As part of a Data Science project, developed some Python code for a NLP problem. Learning about the implementation of Mathematical concepts in Code.
 - Gained insight into the technology market and cultural differences amongst consumers by leading a Business Intelligence project investigating emerging markets and North America with both the Marketing team and the Data team.
- Summer 2009 **Data Scientist Intern, LetsFace, Shanghai.**
- Initiated the research and development of a new Event management product
- Market research of what became the product at <http://letsface.cn/>
 - Working closely with the CEO and Marketing director on the key customer groups - using k-means clustering for analysis.

Sept 2008 - **Technician**, *Our Ladys Grammar School*, Newry.

June 2010 Supervised an A Level Physics class

- Presented expert knowledge, both verbally and in writing, in a comfortable, professional manner
- My experience working in a school enhanced my communication skills through presentations, resilience by overcoming the challenges of supporting youngsters in their education, innovation by delivering results on a modest budget e.g. using python scripts to explain Physics and negotiation skills by working with students and teachers.
- Developed leadership skills through supervising and leading projects such as Young Scientist competitions.
- Initialized and led the promotion of promotion skills throughout the school as part of promoting coding for students, before handing this over to the Technology department before my departure.

Education

2010 - 2014 **MSc**, *University of Luxembourg*, Luxembourg.

Masters in Mathematics

2005-2008 **BSc**, *University of Bristol*, UK.

Bachelors in Physics and Philosophy

Masters Thesis

title *Concentration of Measure and Statistical Learning Theory applied to Time Series models*

Bachelors thesis

title *On the Anholonomy of Light in Coiled Optical Fibers*

Data Science community contributions and projects

2015 PyCon Italy- PyData track - How to get Data Science Models into Production

2015 A probabilistic programming approach to predicting the Six Nations the first major submission to the acclaimed open source book **Probabilistic-Programming-and-Bayesian-Methods-for-Hackers** <http://bit.ly/1FcoERX>

2014 Regularly blog and use social media to discuss data science

2014 I enjoy giving presentations on data science to non-technical and technical audiences - <http://www.speakerdeck.com/springcoil>

2014- I have made contributions to Python Open Source projects such as the popular Pandas library and I am an Open Source advocate

2005- Tutor on Mathematics, Physics, Problem Solving, Programming and Statistics to a range of clients

Soft and Analytical skills

Presentation Experienced speaker about data and business problems to technical and non-technical audiences

Perseverance Maintained self-motivation while working independently to achieve a difficult long-term goal

Computer skills

Technologies Matlab, Shell, Python, Excel, \LaTeX , SQL, R, Github, Agile, Hive

Concepts NLP, Probabilistic Models, Machine Learning, Data Mining, Data Structures

Mathematics skills

Super Stochastic Analysis, Forecasting, Statistical Inference, Bayesian Statistics, Probability, Topology, Mathematical Finance, Statistics

Languages

English Native

French Basic