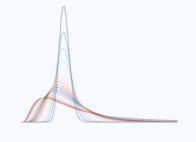
JAMES GAMMERMAN

I'm a data scientist with a Master's degree in Machine Learning. I have 4 years of experience as a data scientist and 8 years in data analysis more generally.

Within data science my main interest is in the application of machine learning techniques to business data, both classical and modern. I have also published research on machine learning in academic journals.

Outside of my career my main interests are sports, music, current affairs and technology.



View this CV online with links at jamesgammerman.com/cv

EDUCATION

2018 | 2016

MSc (part-time), Machine Learning

Royal Holloway University

OLONDON, UK

- · Grade: Distinction
- Selected modules: deep learning, standard classification and regression algorithms, clustering, kernel methods, Bayesian methods, time series analysis
- Thesis: Predictive Maintenance with Conformal and Probabilistic Prediction: A Commercial Case Study
- · Won award for best thesis

2013 | 2009

MSci, Chemistry

Imperial College

Q London, UK

- · Grade: 2:1
- · Masters project in computational chemical physics: Heat Transfer in Ionic Liquids
- · Won award for best thesis presentation

CONTACT

■ jgammerman@gmail.com

§ jamesgammerman.com

G github.com/jgammerman

PROFESSIONAL EXPERIENCE

Current | 2017

Data Scientist

Centrica

🗣 London, UK

- Responsible for full data science lifecycle in many projects: Data collection, cleaning, exploration, wrangling, analysis, modelling and reporting/deployment
- Customer contact propensity: Leveraged Azure stack (Databricks, Azure ML, Azure Data Factory, Azure DevOps) and machine learning to predict probability of customers calling the company within the next 7 days. Currently being productionised for use in call centre management.
- GDPR compliance text mining: Applied natural language processing to find potential GDPR exposures in company databases, prior to law taking effect. Helped save company potential fines of up to millions of pounds due to GDPR breaches.
- Predictive maintenance: Applied machine learning to predict time-to-failure of a key component at company's gas terminal in northwest England
- Revenue forecasting: Rebuilt SQL-based engine using R and AWS to forecast revenue from electricity usage of customers in North America, saving company thousands of dollars per year in reduced pipeline run-times
- · Safety data science: Applied natural language processing to HSE data to draw up list of main problem areas at company's offshore gas terminals.
- Training collegues: Gave several workshops on programming and business analytics; also co-wrote materials for these workshops (see below)

017 • Business Analyst

ExxonMobil

Q London, UK

- Provided analytical support for company's gas production projects in Kazakhstan & North Sea, mainly cashflow modelling
- · Provided ad hoc analytical support to company's gas traders
- Various other projects e.g. analysing gas market liquidity and investigating price patterns

LANGUAGE SKILLS

R	
Python	
SQL	
Bash	
MATLAB	
HTML	
CSS	

Made with the R package datadrivencv.

Last updated on 2021-03-27.

2017 | 2013



ACADEMIC PUBLICATIONS

2020

Journal article: Multi-level conformal clustering: A distribution-free technique for clustering and anomaly detection¹

Neurocomputing, Volume 397, 2020, pp. 279-291

- · This paper was developed from my MSc thesis project.
- · We introduced a novel technique which combines clustering and anomaly detection, and outlined its advantages over classical clustering techniques.

2019

Poster: Conformal Anomaly Detection based on Association Rules²

Proceedings of Machine Learning Research, Volume 105, 2019, pp.246-7

- · In this commercial application we developed a new data cleaning technique.
- · It combines a rule-based machine learning technique called association rule mining with the conformal prediction framework. This allowed us to automatically identify likely errors in Centrica's SAP database which could then be manually corrected.

I have recently started publishing research in academic journals in collaboration with my alma mater Royal Holloway University.

Mv main area of interest relates to conformal prediction, a framework for dealing with uncertainty in supervised machine learning.

♣┛ TALKS & TEACHING

Current 2018

Training: Business Analytics in R - An Introduction to Statistical Programming³ Various Locations Centrica

· I have presented this workshop several times to company employees across the UK. It teaches the basics of programming for data analysis in a business context.

I have given public talks on machine learning, and periodically teach workshops to my colleagues on the subject of programming and business analytics

2018

Talk: Machine Learning: Progress & Prospects

Odessa University, Ukraine

Odessa, Ukraine

· Guest lecture at Data Science meetup

☑ DATA SCIENCE WRITING

2021

Blog post: Predicting NFL stadium attendances⁵

www.jamesgammerman.com

· Used supervised machine learning techniques to predict attendances at NFL matches

2020

Blog post: Analysing cocktail recipes with machine learning⁶

www.jamesgammerman.com

· Used unsupervised machine learning techniques such as PCA and t-SNE to analyse cocktail recipes



- 1: https://www.sciencedirect.com/science/article/abs/pii/S0925231219316169
- 2: http://proceedings.mlr.press/v105/balinsky19a.html
- 3: https://www.jamesgammerman.com/talk/centrica_workshops/
- 4: https://www.youtube.com/watch?v=n5iz5GPdO5Y
- 5: https://www.jamesgammerman.com/post/predicting-stadium-attendances-with-tidymodels/
- 6. https://www.jamesgammerman.com/post/cocktail-recipes-analysis/

I have recently started a personal website where I upload some of my data science work