

Address

55 Bannow Road
Cabra,
Dublin 7,
Ireland

Nathaniel Forde

Data Scientist and Logician

Tel & Skype

+353 86 0525426
NathanielForde.skype

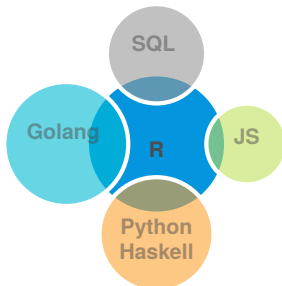
Mail

nathaniel.forde@
gmail.com

Web

nathanielforde.wp.com/
<https://nathanielf.github.io/>

Programming



Selected Experience

2019 - Now **Cartrawler** Dublin, Ireland

Data Scientist

Building and maintaining models to move markets. Focused on timeseries forecasting and insurance claim prediction with explainable ML

2018 - Now **Paddy Power Betfair** Dublin, Ireland

Senior Insights Analyst

Working within the Customer Operations Insights team using data science techniques to better understand the needs of the customer, in areas of Fraud, Responsible Gambling, CS, CX, Payments

Notable projects:

- Developed bespoke model for NLP and sentiment analysis for the gaming industry based on customer service chat-data
- Worked with industry think tank to refine and augment external and internal model for predicting problem gambling.
- Deployed propensity modelling projects to evaluate effects of interventions with customers e.g. the ROI for VIP relationship management.
- Built Shiny web-app for the measurement of customer service QA procedures.

2017 - 2018 **Marsh and McLennan - Innovation Centre** Dublin, Ireland

Software Developer

Working within the CAT Risk Studio™ developing web-apps to process and automate analytical solutions for statistical model assessment and refinement. Tools were built to compare industry portfolio prediction models against the historic record and Monte Carlo simulations.

The CRS conducts research in collaboration with 3rd parties to provide insight into catastrophic risk models for Guy Carpenter globally. Web development conducted with the following stack: Golang, Postgres, JS (React, D3).

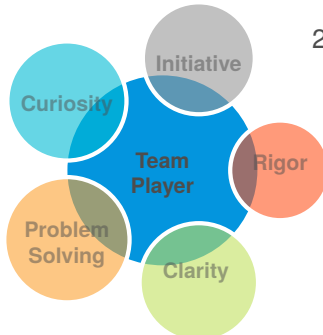
2015 - 2017 **Marsh and McLennan - Innovation Centre** Dublin, Ireland

Data Analyst

Worked within a team of four (expanding) to design and implement the Data Quality function for Marsh globally.

- Developed statistical metrics and classification methods to assess the health of numerous data-sets including placement, sales, billing, and reference data.
- Established the data-quality process within Marsh for reporting and remediation of data-quality issues.
- Built various reporting tools and analytic dashboards (Qlikview, Tableau, Shiny-Apps) to motivate increased data-quality (GIGO).
- Developed over-sight procedures of statistical process control to ensure the data-quality function was maintained and operated as designed.
- Coordinated with international teams to monitor and assess the process and progress of Data-Quality initiatives.
- Conducted bespoke analyses at request from senior stakeholders.

Personal Skills



BI Preference

Qlikview ★★★★★

Tableau ★★★★★

Power BI ★★★★★

Places Lived



Languages

English ★★★★★

French ★★★★★

Masters: Coursework

Modal Logic,
Statistical & Formal
Semantics,
Dynamic Epistemic
Logic,
Generative
Grammars,
Set Theory,
Probability,
Decision Theory,
Analytic Philosophy:
Frege to Kripke

2009 - 2011

Trinity College Dublin

College Green, Dublin, Ireland

Researcher/TA - Philosophy Department

- Successfully designed and provided tutorials for sophomore mathematical logic courses, with a 90% pass rate.
- Set homeworks and graded examinations. Taught private classes (at request) in logic and mathematics.

Education

2011 - 2013

Master's Degree in Mathematics

University of Amsterdam

Dependence in Logic and Probability

This thesis developed models of explanatory updates within dynamic epistemic logic where strong and weak explanatory relationships were modelled using multiple dependence relations (e.g. transitive and non-transitive) drawn from deductive modal logics and Bayesian statistical networks.

2009 - 2011

Master's Degree in Philosophy

Trinity College Dublin

Identity over Possible Worlds

The thesis explored various philosophical applications of first order modal logics.

2005 - 2009

Bachelor's Degree in Liberal Arts

UCD/La Sorbonne

1st Class Honours

Courses in Philosophy, Mathematics, Politics, History and Literature

Awards and Achievements

05/2015

Mongol Rally

Christina Noble Foundation

Raised money for charity by completing endurance race to Mongolia

09/2010

Irish Research Council - Graduate Scholarship Funding

TCD/UvA

Awarded on merit for my masters' research

09/2009

Philosophy Department Scholarship

TCD

Relevant Certifications

2015

Mathematical Biostatistics Bootcamp

Coursera. E-learning

Probability and Statistics

2015

Machine Learning

Coursera. E-learning

Optimization and Statistical Learning

2015

Regression Models

Coursera. E-learning

Linear and Logistic Regression

Projects and Interests

Projects

Ongoing

Statistical Inference and Algorithms

Independent Research

Motivated by an interest in the interplay between the statistical algorithms and inference. See my blog **Examined Algorithms** (in progress)

Ongoing

Running and Biking

Independent Interest

Focused on endurance over distance.

July 1st, 2019

Nathaniel Forde