

Rolf Britten

Curriculum Vitae

*Qualified Actuary with a proven record of delivering high-quality projects, models and analyses.
Experienced in personal lines insurance with a particular interest in nascent pricing technologies and techniques.*

Education

2016 – 2019	Institute and Faculty of Actuaries FIA
2010 – 2013	University of Exeter BSc [Hons] Mathematics - 2:1 <i>Advanced Statistical Modelling, Stochastic Processes, Numerics and Optimisation</i>

Professional Experience

LV= General Insurance:

Data Science Manager *February 2022 – Present*

- Managing Data Science use cases across breadth of insurance domains

Direct Line Group:

Data Scientist - Pricing & Underwriting *June 2021 – January 2022*

- Technical Lead on DLG's Pricing Transformation for motor risk models.
- Delivered a step-change in predictive performance with estimated impact exceeding target from Pricing Transformation programme through Tactical delivery of value.
- Laid foundation and secured CTO buy-in for Strategic pricing infrastructure.
- Built Emblem open-source prediction library to gather quicker and deeper insight from baseline models.

AXA Insurance:

Data Science Manager *March 2020 – May 2021*

- Drove technical excellence, business-focused R&D and adoption of improved tools/techniques across AXA Personal Lines pricing
- Provided automations for compliance and QA review of ML explainability packs for model refreshes; implemented algorithms from literature review and created novel processes based on stakeholder requirements
- Designed process for geographic smoothing in non-linear model pipelines; recommendations implemented as next motor risk model refresh with predictive improvement equivalent to previous full refreshes
- Owner of common code shared through R and Python packages
- Explored, load tested and benchmarked cloud-based scoring pipeline optimisations to meet SLAs at peak IHP volumes.

Technical Pricing Manager *March 2019 – Feb 2020*

- Responsible for maintenance and improvement of motor risk pricing for AXA's direct brands
- Led analysis, modelling, reporting and ad hoc investigations whilst providing line management responsibilities across a team of 4 analysts
- Delivered first incremental refresh of machine learning risk models; value generated through innovative new features, collaborating with Data Science
- Peril Allocation research project discovered improved split for injury claims model
- Complete re-build of AvsE interactive reporting: Included tools to automatically flag and rank problematic n-way segments and dynamic plots with approximations for statistical significance

Senior Technical Pricing Analyst *January 2018 – February 2019*

- Key member of team which delivered new ML model suite. Main overseer of data wrangling, rating system deployment, impact analysis and project retrospective
- Feature engineering from test-level MOT data, followed by analysis and presentation of statistically significant pricing deficiencies
- Developed bespoke functions for in-house R packages; included ML explainability plots in interactive html to achieve buy-in of new ML models through assuring stakeholders
- Chaired regular meeting for cross-team analysts to present work and share knowledge

Technical Pricing Analyst *June 2015 – December 2017*

- Refreshed Motor Risk Pricing models in Emblem and wrote the code for SAS Data Prep, post-deploy analysis and monitoring
- Developed in-house alternative to market-leading geographic analysis tool in R which was shared across AXA globally: Incorporated several bespoke algorithms to compete/ensemble. Tool gives consistent improvement in performance on unseen data on problems across AXA Group
- Examined claims development across rating factors and created bootstrap solution to assess significance of observed differences
- Re-wrote Motor ELR process: Integrated stochastic elements to demonstrate to stakeholders the variance of loss ratio predictions

Rating Engine Analyst *April 2014 – June 2015*

- Proactively working with several areas of the business (such as pricing, commercial and IT teams) in order to deliver accurate and timely pricing changes, small change, defect fixes and projects
- Received award from MD for delivering Group Internal Audit action to design and implement automated solution for testing of aggregator value mappings against a tight deadline.
- Devised several highly effective changes to team's processes - including digestible log of production rating models for stakeholders and weekly prioritisation meeting

Skills

Leadership and Communication I try to embed the best elements of **Agile** operating models in the way I work and manage the work around me. Focusing on the customer, constant communication and Test & Learn are a few of the principles that I find most beneficial in getting the most value from an analytical function. I enjoy **coaching** colleagues and I manage my relationships with emphasis on engagement and empowerment. I am comfortable adapting the style and content of my **presentation and communication** as appropriate; to update stakeholders, secure buy-in and engagement, or to generate discussion and ideas.

Innovation Driving improvements to processes and models using novel ideas and methods, in order to deliver a competitive edge to the business is something I truly enjoy. I try to work in a way which **challenges and improves processes** while maintaining focus on objective outcomes. Throughout my career I have made improvements to many processes across multiple domains. I encourage my colleagues to develop and share knowledge and ideas to improve ways of working and the communication of results to stakeholders.

Technical Knowledge I am motivated by the challenge of designing elegant solutions to business problems. I always look to add to my technical skill set; whether that be learning from those around me, Actuarial Exams or continuous online learning

Interests

Endurance Cyclist Lead cyclist on corporate charity rides, responsible for safety and morale.

Charity volunteer Event volunteer and technical consultant.