

Pat Reen

Data scientist | Financial services professional | Actuary

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- **J** 0280 035 034
- Australian
- pat-reen.github.io/More-Modelling-Recipes/
- in Patrick-Reen
- Pat-Reen
- Resume PDF

EDUCATION

Fellow (FIAA)

Actuaries Institute, Australia 2015

Fellow (FIA)

Institute and Faculty of Actuaries, UK

Bachelor of Business Science

University of Cape Town 2008

INTERESTS

Data strategy, management

Advanced analytics

Automation

Reporting, visualization



I have over 13 years' experience in large multinational financial services businesses focusing on data science, management information, financial analysis and process improvement. In my most recent roles I led teams in measuring and reporting on business performance, providing actionable insights from the analysis of financial and operational data.

I have extensive experience in process overhaul and using data analytics and predictive modelling to inform business decisions.

■ INDUSTRY CONTRIBUTIONS

Actuaries Analytical Cookbook - Created and supported a cookbook of data and analytics recipes, a resource to actuaries.

Information Note, Analysing Disability Income Experience - Contributed to information note on setting pricing and reserving assumptions for future claims experience.



Pricing and Analytics Consultant

Munich Reinsurance, Australia (MRA)

Reporting to Head of Group Insurance (HoGI)

In this role I consulted on the redesign of group pricing processes with a view to improving efficiency, increasing automation, increasing the level of result granularity, reducing operational risk and upskilling the team.

- · Translated business needs into technical requirements
- Advised the HoGI and head of group pricing on project plans and timelines
- · Led the viability assessment of proposed software solutions
- Devised and led the execution of the solution testing plan
- Modified plans based upon cross-functional input e.g. group enterprise architecture, external software providers, life (retail) and non-life teams.

Deputy Appointed Actuary

Oct 2020 - Feb 2022

Westpac Life Insurance Services Limited, Australia

Reporting to Appointed Actuary

Key achievement: Accelerated experience analysis components from months to weeks - the more rapid granular analysis supported flexible financial modelling/ scenario testing.

- I joined the team to support the sale of the life business by Westpac Group through due diligence analysis, buyer workshops and Q&A sessions.
- Owned the BAU experience data analysis, reporting and review process.
- · Led the team's efforts in streamlining the analysis processes
 - o automated data ETL, Alteryx to SQL database
 - o visualised deterministic predicted claim confidence intervals against actuals, Tableau
 - o applied supervised learning methods to derive adjustments to predictions, R
 - o communicated outcomes to the leadership team and managed stakeholders.
- Led data driven initiatives that contributed to pricing refinements.
- · Led the team's efforts in the completion of monthly AIFRS profit and regulatory reporting.
- · Designed and tested analytical models to support business decisions.
- Owned the financial analysis and communication process and outcome, enabling senior and executive managers to understand the key results drivers and take appropriate action.
- Managed and guided a team of financial services professionals (including offshore team members) to meet deliverables, improve
 efficiency and achieve their goals.

Head of Business Finance

Feb 2019 - Sep 2020

Reinsurance Group of America, Australia (RGAA)

Reporting to the Chief Financial Officer (CFO)

Key achievement: Accelerated BAU financial analysis from days to hours - tools highly praised by the Board and adopted in other geographies.

- Led the team's efforts in a complete automation of financial analysis and reporting, leveraging database architecture to eliminate dependencies on spreadsheets and streamline reporting and data visualization software to deliver tailored data-driven reporting.
- Owned the financial analysis and communication process and outcome. Challenged the result, drawing on strong relationships with other business functions.
- Championed data driven initiatives and projects that facilitated proactive client engagement.
- Collaborated with the legal, pricing, underwriting and claims teams on deep-dive analyses of performance drivers for selected blocks of business.
- Developed best-of-breed dynamic performance dashboards for senior management and local and parent Board / Board Committees.

Deputy Chief Valuation Actuary, Previously 2IC

May 2016 – Jan 2019

Reinsurance Group of America, Australia (RGAA)

Reporting to the Appointed Actuary

Key achievement: Together with the Chief Valuation Actuary (CVA), re-staffed and upskilled a team that had experienced high turnover, resulting in significant control uplifts.

- Co-ordinated the team's contribution to the annual financial statements and managed the relationship with 3rd line of defence functions
- In conjunction with the CVA, led the team's efforts in the completion of monthly reporting, analysis of profits as well as quarterly Regulatory Capital reporting and APRA reporting.
- Supported the delivery of the Internal Capital Adequacy Assessment Process (ICAAP) report and the Financial Condition Report (FCR).
- Assisted the Appointed Actuary in preparing formal actuarial advice for the business.
- In conjunction with the CVA, championed 1st line of defence improvements.
- Led the team in cross-functional knowledge sharing and enhancing reporting.

Sep 2022 - Present

Research Actuary May 2014 – Apr 2016

Reinsurance Group of America, Australia (RGAA)

Reporting to the Head of Research/ CRO

Key achievement: Increased the frequency and granularity of data analysis for key blocks of business which allowed more dynamic repricing for rapidly evolving experience.

- Translated client analytics and industry experience into business insights/ predictive models and communicated results directly to RGAA management.
- Led the team's efforts in experience analysis/ developing assumption basis proposals.
- Collaborated on pricing exercises, notably longevity business; and an instalment TPD product, working closely with business specialists in claims and rehabilitation.
- Delivered RGAA's ICAAP report to the CRO and supported the FCR.
- Challenged the design of underlying models and analytics against intended purpose.

Corporate Actuary/ Actuarial Specialist

Jan 2009 - Apr 2014

MMI - Metropolitan, South Africa

Reporting to the Appointed Actuary

Key achievement: Streamlined the modelling of new products as well as product migrations through championing cross-team knowledge sharing.

- Led the team's efforts in the financial reporting of 14 international subsidiaries of varying complexity, communicating outcomes directly to MMI management structures.
- · Assessed the business impacts of new or altered products and changes to the capital regime.
- Co-ordinated the migration of the valuation/reporting of products across divisions.
- Co-ordinated the regulator stress test calculations for Individual Life products.

SKILLS & PROFICIENCY

Tableau	
Alteryx	
SQL, SSIS	
R	
Prophet	
Python	