

CRYSTAL FAN, ASA

ACADEMIC BACKGROUND

SOCIETY OF ACTUARIES 2018 - Current
Associate of the Society of Actuaries specializing in Quantitative Finance and Investment

UNIVERSITY OF BRITISH COLUMBIA | Vancouver, BC Expected August 2023
Master of Business Analytics

- Anticipated Coursework: Text analysis in Python, Regression modeling and Time Series in R studio, Optimal solution with Gurobi; Data management in SQL

SIMON FRASER UNIVERSITY | Vancouver, BC 2016-2021
B.S. in Actuarial Science and a minor in Statistics

- Cumulative GPA: 88% Upper Division GPA: 94%

Honour

- Undergraduate Open Scholarship for all terms
- Dean's Honour Roll
- Aon R. Bruce Cole Memorial Scholarship in Actuarial Science

TECHNICAL SKILLS

MATLAB: Option pricing and numeric analysis	R & R-Studio: Predictive modeling
GGY AXIS: Actuarial software	Access and VBA: Automations
SQL: Data collection and cleaning	Tableau: Dashboard building

PROFESSIONAL EXPERIENCE

SUNLIFE FINANCIAL | Toronto, ON July 2021 - Current
Actuarial Associate – Defined Benefit Solution, Longevity Research and Development team

- Communicated with the internal valuation team, Statistic Canada, and external data providers to gather insightful data for predictive model building
- Performed data check and cleaning on metadata to remove abnormal observations
- Fitted generalized linear model to experience data and evaluated model selections and parameter selections on the target business block
- Predicted death for each policyholder and analyzed the implication between prediction, experience, and valuation's expectation
- Provided pricing team with insights during quotes season and helped in reaching annual sales target in October

SUNLIFE FINANCIAL | Toronto, ON May 2020 – August 2020
Actuarial Analyst Intern – Group Benefit Valuation team

- Prepared the filtered and validated five-year data in Access with automation improvements to save up to 20% of running time
- Adopted new Canadian Institution of Actuaries (CIA) termination rate in Actual over Expected adjustment factor calculation
- Participated in the development of the predictive model and tested the significance of additional explanatory variables

- Led a special pricing initiative project to embed additional accidental death benefit coverage in the current GGY Axis setup
- Selected and validated the cost-efficiency balanced plan and prepared formal documents for management's review

INDUSTRIAL ALLIANCE FINANCIAL | Vancouver, BC

May 2019 – April 2020

Actuarial Analyst Intern – Dealer Service Group

- Build unearned premium cohort triangle based on various products' earning patterns and generate financial statements projection to product level
- Performed sensitivity tests on different lines of business based on various risk exposures and evaluated the total impact on the asset, liability, and operating incomes
- Used Visual Basic Application to accommodate investment piece in distributing earning calculation for Financial Capital Test (FCT)
- Led monthly valuation for extended warranty product and communicated with external auditor on valuation results at year-end

LEADERSHIP EXPERIENCE

SUNLIFE FINANCIAL | Vancouver, BC

January 2022 – August 2022

Actuarial Coop Coordinator

- Coached two actuarial interns on future career guidance and set up 1:1 with interns for regular check-in
- Organized case competition and end-of-term presentation for over 25 interns, searched for suitable case topics, and arranged timetable based on personal preferences

ACTUARIAL STUDENTS' NATIONAL
ASSOCIATION (ASNA) | Toronto, ON

January 2019 – February 2021

Head Delegate for Simon Fraser University

- Participated in head delegate meeting for the preparation of ASNA annual convention and spoke for the needs of students at Simon Fraser University
- Hosted informational session for actuarial science and statistics student club to promote conversion
- Led over 20 students traveled from Vancouver to Toronto and supported them with accommodation and reimbursement

ADDITIONAL INFORMATION

- Fluent in Mandarin Chinese
- Thorough working knowledge of MS Office Suite, Tableau and R-studio
- Interested in camping and hiking
- Guitar starter