Lubasi Sebopeng Nkalolang

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Summary

Highly motivated and analytical Actuarial Science student with a strong academic record and comprehensive foundation in mathematics, statistics, finance, and economics. Possessing demonstrated practical experience in data analysis, process automation, and software development through the application of programming languages including Python, R, Excel, Power BI, and SQL. Proven ability to leverage technical skills and problem-solving capabilities to address complex challenges in financial and actuarial contexts.

Education

Ba Isago University | Bachelor of Commerce Honors in Actuarial Science | 2021 – Present

- Engaging in a rigorous program combining advanced theoretical knowledge and practical skills in actuarial science, risk management, and financial analysis.
- **Academic Standing:**
  - Year 3: Industrial Attachment - First Class Pass (77%)
  - Year 2: Upper Second Class (68.6% average)
  - Year 1: Upper Second Class (73.8% average)

Relevant Coursework

- **Actuarial Statistics I & II:** Study of probability theory, statistical distributions, and statistical inference as applied to actuarial modeling and risk assessment.
- **Financial Mathematics:** Focus on the time value of money, annuities, bonds, loans, and the mathematical theory behind financial instruments.
- **Corporate Finance I:** Principles of corporate financial management, including investment decisions, financing decisions, and dividend policy.
- **Risk Management:** Identification, assessment, and prioritization of risks followed by coordinated and economical application of resources to minimize, monitor, and control the probability and/or impact of unfortunate events.
- **Life Contingencies I:** Mathematical models for analyzing future lifetime and financial events dependent on human life, fundamental to life insurance and pensions.
- **Computer Packages and Applications in Insurance:** Practical application of software

and tools relevant to the insurance industry, including data management and analysis.

- **Visual Basic for Applications (VBA):** Programming within Microsoft Office applications, particularly Excel, for automation and custom functionality in financial and data tasks.
- **Survival Models:** Statistical models used to analyze the time until one or more events happen, such as death or failure of a component.
- **Stochastic Modeling:** Development and analysis of mathematical models that involve randomness, used to model uncertain systems over time, relevant in financial and actuarial contexts.
- **Financial Economics:** Application of economic principles to financial markets, including asset pricing, market efficiency, and behavioral finance.
- **Principles of Economics / Microeconomics / Macroeconomics:** Foundational economic theories covering individual and market behavior, as well as the study of the overall economy.
- **Calculus I / Calculus of Several Variables:** Essential mathematical tools for understanding rates of change, accumulation, and functions of multiple variables, critical for advanced actuarial concepts.
- **Further Mathematics:** Advanced mathematical topics building upon foundational concepts, providing a deeper understanding of mathematical principles relevant to actuarial science.
- **Introduction To Accounting / Accounting 1A / 1B:** Fundamental principles of financial accounting, including recording, classifying, and summarizing financial transactions.
- **Business Communication:** Development of effective written and verbal communication skills for professional settings.
- **Principles of Management:** Core concepts and theories related to planning, organizing, leading, and controlling in a business environment.
- **Commercial Law I:** Introduction to legal principles relevant to business and commerce.
- **Conflict Transformation and Leadership:** Skills and approaches for managing and resolving conflicts and developing leadership capabilities.
- **Introduction to Business:** Overview of fundamental business concepts, structures, and functions.
- **Principles of Marketing:** Introduction to the concepts and strategies involved in marketing products and services.
- **Risk And Insurance:** Study of the principles of insurance as a mechanism for risk transfer and management.
- **Research Methods In Insurance:** Methodologies and techniques for conducting research within the insurance domain.
- **Actuarial Financial Mathematics:** Advanced application of financial mathematics concepts to actuarial problems.
- **Pensions & Benefits:** Study of retirement planning, pension schemes, and employee benefits.
- **Topics In Applied Mathematics:** Application of mathematical techniques to solve problems in various fields, including those relevant to actuarial science.

St. Josephs College | Botswana General Certificate of Secondary Education | 2019 – 2020

Graduated: 45 points

Experience

Actuarial Intern | Empirica Actuaries, South Africa (Remote) | January 2024 – March 2025 (11 Months)

- Collaborated closely with senior actuaries on core financial reporting and forecasting tasks, gaining in-depth exposure to industry practices and data requirements.
- Contributed significantly to the development and enhancement of internal tools and processes, analyzing existing workflows and implementing improvements that demonstrably increased team efficiency and accuracy.
- Supervised and provided technical guidance and mentorship to junior interns on various project tasks, fostering a collaborative learning environment and ensuring project milestones were met.
- Automated manual data processing and reporting procedures through the development and update of technical scripts and tools, leading to a reduction in processing time and potential for error.
- Conducted comprehensive data analysis on insurance contract portfolios and key financial metrics using advanced analytical techniques in R and Python, providing crucial insights that supported the development and validation of actuarial models for insurance and reinsurance variables.
- Played a key role in the development of an automated financial reporting tool, contributing to the design and implementation of features for stress testing, financial forecasting, and portfolio optimization to streamline complex analytical processes.
- Assisted in the successful deployment of cloud-based web applications designed for actuarial data management, implementing robust Create, Read, Update, Delete (CRUD) operations utilizing SQLAlchemy and contributing to the optimization of database performance and overall system scalability.
- Developed custom Office Add-ins and taskpane enhancements using Visual Basic for Applications (VBA) to integrate advanced financial analysis functionalities directly within Microsoft Excel, significantly streamlining data manipulation and reporting workflows for the team.
- Prepared detailed and comprehensive reports and visualizations using Power BI and other relevant tools, effectively communicating complex actuarial findings, financial projections, and risk assessments to both technical and non-technical stakeholders.
- Partnered effectively with cross-functional teams, including software development and

finance departments, to deliver integrated data-driven solutions and contribute to key strategic projects spanning actuarial science, software development, and broader business process improvement initiatives.

Skills

Programming & Data Analysis:

- Python (Pandas, NumPy, SciPy)
- R and RStudio
- SQL
- Visual Basic for Applications (VBA)
- Golang

Software & Tools:

- Microsoft Office Suite (Excel, Word, PowerPoint)
- Microsoft Power BI
- Git & GitHub

Actuarial & Domain Expertise:

- Financial Mathematics
- Actuarial Statistics
- Risk Management
- Life Contingencies
- Survival Models
- Stochastic Modeling
- Financial Economics
- Corporate Finance
- Financial Literacy

Soft Skills:

- Critical Thinking
- Problem Solving
- Data Analysis & Interpretation
- Teamwork & Collaboration
- Communication (Written & Verbal)

- Time Management & Organization
- Adaptability
- Mentoring & Supervision

Achievements and Activities

- Awarded Bronze Medal in the Senior Mathematics Olympiad 2020, demonstrating strong mathematical aptitude and competitive problem-solving skills.
- Served as Class Representative, August 2020 – Present, showcasing leadership, communication, and organizational abilities within an academic setting.

Languages

- **English**
- **Setswana**

References

- Olebogeng Mokgware | Ba Isago University | AG, Dean, Faculty of Commerce | Head of Department Risk Management, Insurance and Actuarial Science | 11 Koi Street, Peolwane, Gaborone | +2673957744 | olebogeng.mokgware@baisago.ac.bw
- Suleman Patel | Ba Isago University | Actuarial Science Lecturer |11 Koi Street, Peolwane, Gaborone | +26777934199, | suleman.patel@baisago.ac.bw
- Edwin Puso Afitile | Founder of Empirica Analysis | Actuary | IFRS 17 | Ethics Certification Candidate at The Ethics Institute (TEI) & University of Stellenbosch Business School | Tech (Django, Python, R) | +27 60 722 4784 | eafitile@campempirica.com