# PATRICK MOEHRKE

## **Technical Consultant | Cloud Practitioner**

I am an aspiring DevOps engineer with demonstrated experience in cloud development, solution architecture. and machine learning. I am a self-starter who values open source and continuous learning, with my current focus being cloud native techniques.

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Somerset West, Western Cape, ZA

Open to on-premise, hybrid, and remote work

## **SKILLS**

#### **Tech Stack**

Python | R Julia SQL D Bash **JavaScript** Lua **MTFX** Git Docker Linux GitHub Actions Terraform EC2 **S**3 **API** Gateway Lambda CodePipeline **ECS** 

#### **Technical Skills**

Containerisation CICD IaC

Scripting RESTful APIs

Serverless Computing

Solution Architecture

**Technical Documentation** 

Explainable ML | MLOps

## **Professional Skills**

Technical Writing | Mentoring

Stakeholder Engagement

Innovation | Critical Thinking

Collaboration

## **EXPERIENCE**

#### Actuarial Consultant | Actuartech

July 2020 - Present

As part of a team of 6, I develop solutions and training material that contributes to business development needs and addresses clients' business requirements, drawing on DevOps tooling, machine learning, and the cloud. Using different programming languages and environments, I:

- Developed, architected, and deployed a serverless data management and dashboarding solution on AWS to report financial results aligned with a new international reporting standard (IFRS 17) at a reduced cost vs other solutions.
- Identified and documented risks present in the current architecture of a multinational reinsurer's actuarial & financial reporting solution, and proposed a future implementation state to stakeholders.
- Developed, tested, and documented a financial reporting solution for a South African life insurer to ensure compliance with a new international reporting standard (IFRS 17).
- Architected, tested, and developed a low-cost, full-stack serverless web app to conference attendees over 3 days, handling +3 000 API calls with zero failures. The application used a NoSQL database to track attendee details as well as REST API calls to Lambda functions to read and write to the database and perform input sanitation.
- Conducted annual mortality experience reports in Python for a South African life insurer using statistical and probabilistic modelling techniques to validate current assumptions and advise on their anticipated mortality experience.

#### Academic Tutor | Stellenbosch University

iii January 2020 - July 2020

I served as an academic tutor for Actuarial Science 112 (financial mathematics). This included mentoring, explaining complex topics, and reviewing assignments.

# AWARDS & CERTIFICATIONS

AWS Solutions Architect Associate | 2023

AWS Certified Cloud Practitioner | 2023

Technical Member of ASSA | 2022

Golden Key International Honours Society | 2019 Stellenbosch University Dean's Merit List: 6 Subjects | 2019 Stellenbosch University Merit Bursary | 2018

# **EDUCATION**

#### BCom Honours Actuarial Science | Stellenbosch University

**i** Jan 2020 - Dec 2020

Completed coursework and a research project ('Evaluating the use of genetics to calculate risk premiums with applications to Huntington's Disease'). Focal areas included risk management, financial engineering, and statistical programming.

## BCom Actuarial Science | Stellenbosch University

**a** Jan 2017 - Dec 2019

Holistic student with demonstrated academic performance and involvement in campus societies. Subject areas included actuarial science, statistics, computer science, mathematics, and economics.

#### IEB National Senior Certificate | Beaulieu College

**i** Jan 2012 - Dec 2016

IEB matric certificate with an A average. Awarded top achiever in 3 subjects.

# **REFERENCES**

Available upon request.