Aidan Elias

SOFTWARE ENGINEER

Profile

As a dedicated software engineer at Capitec, I hold a BSc and BScHons degree in Computer Science, bringing a solid foundation of theoretical knowledge and practical skills to my role. Focused on delivering innovative solutions, I leverage my academic background to contribute effectively to Capitec's technological advancements and software development initiatives. Committed to excellence, I continually strive to enhance and apply my expertise in the dynamic and evolving field of technology.

Employment History

Tutor/Mentor, Stellenbosch University

2020

Stellenbosch, Western Cape, South Africa
Tutor for first-year Computer Science course where students learned about Object Oriented programming and basic data structures.

Roles and responsibilities

- Providing assistance with tutorial problems.
- Providing extra classes to explain core programming concepts.
- Marking of student tests and assignments

Programmer (Junior Developer), Capitec, Stellenbosch

JANUARY 2021 — JUNE 2023

I began in technical support, investigating and debugging technical issues while completing operational tasks. Additionally, I wrote utility programs to enhance operational efficiency.

Roles and responsibilities

- Support and monitor systems
- Investigate system issues
- Implement a fingerprint retrieval tool

Subsequently, I contributed to shaping the initial Capitec Connect infrastructure, utilizing technologies like DynamoDB, Spring Boot, Helm, Terraform, SNS & SQS.

Roles and responsibilities

- Implement microservices in Java using Spring Framework
- Assist with testing microservices
- Modify Terraform scripts to add to our infrastructure
- Investigate issues related to microservices

Software Engineer II, Capitec

JUNE 2023 — PRESENT

During my tenure as a Software Engineer II, I continued to contribute to the evolution of Capitec Connect, refining its infrastructure. I worked with technologies such as S3 for scalable storage, Kafka for efficient real-time data streaming, and PostgreSQL for robust relational database management, deepening my expertise in these areas.

Details

Wellington
South Africa
0785946123
aelias836@gmail.com

NATIONALITY

South African

DRIVING LICENSE

Yes

DATE OF BIRTH

28/11/1998

Links

LinkedIn

Personal Website

Skills

Python

C#

Java

SQL

Docker

Kafka

Kubernetes

Languages

Afrikaans

English

Education

BSc in Mathematics (Computer Science), Stellenbosch University, Stellenbosch

JANUARY 2017 — DECEMBER 2019

BScHons in Computer Science, Stellenbosch University, Stellenbosch

JANUARY 2020 — DECEMBER 2020

Graduated cum laude.

Awards & Achievements

Academic Honouree Colours

2016

Golden Key Member

2017 — 2020

Investec Explore IT Hackathon Winner

2020

Notable Projects

Identifying vehicles and households in a satellite image of Stellenbosch

2020

As part of my BScHons project, I have been tasked with developing a solution that can identify vehicles and households in a satellite image using unsupervised learning techniques. I have made use of techniques such as binary thresholding, morphological transforms, and connected component analysis in my pursuit of a solution.

I made use of Python libraries such as NumPy, CV2, and SkImage.

Lotto Website Scraper

A small side project in which I learned how to obtain South African Lotto data via API calls and visualize it using the Dash library by Plotly.

For this project, I made use of libraries such as Dash, Requests, Pandas, Json, NumPy, and os.

Personal Website

I created a personal website on GitHub pages. I used Jekyll(Ruby), HTML, SASS and Javascript.