

Jaco Moolman

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Machine learning engineer with 23+ years' overall experience. Works with AWS, Linux and Terraform.



Top skills

- AWS
- Linux
- Artificial Intelligence
- Python
- Terraform
- DevOps
- LLM

Summary

About

I am an experienced Machine Learning Engineer and Certified System Administrator with a diverse technical skill set that includes server administration, scripting, software support, and troubleshooting. I am fully bilingual in English and Afrikaans and possess a valid driver's license with my own transportation. With extensive experience in the IT industry, I have developed a strong work ethic, excellent analytical and communication skills, and thrive in fast-paced, high-pressure environments.

I have completed several technical certifications, including AWS Cloud Practitioner, RED HAT System Certified Administrator, and ICP-ICAgile Professional Certified & Certified Disciplined Agilist. In addition, I have a strong understanding of machine learning concepts and have completed several courses on Kaggle, including Introduction to Machine Learning 2021. I have a diverse skill set in various programming languages, including Bash, PowerShell, MQL4/5, Python, and Terraform.

During my time at Capitec Bank, where I served as a DEV OPS and Machine Learning Engineer Level 1, I gained experience in deploying code, server maintenance, backup operations, and assisting with implementing and optimizing machine learning algorithms and models. In my previous roles at FNB Bank, SPI, MTN, IBM, and the Johannesburg Stock Exchange, I gained experience in system automation, report generation, software administration, and troubleshooting, among other responsibilities.

I am a self-starter who is dedicated to achieving results and committed to providing excellent customer service. I am comfortable working independently or as part of a team and am always looking for ways to improve processes and add value to the organization. I am excited about the opportunity to bring my technical expertise, strong work ethic, and ability to work collaboratively with others to a new role.

My online CV can be found here:
<https://jacomoolman.co.za/curriculum-vitae/>

More information about my personal projects can be found here:
<https://jacomoolman.co.za/projects/>

Ideal next job

I am happy working in the AI space and would like to stay in this workspace. I find anything AI very interesting and based all my projects and research on this.
I would like to stay in technical work to learn as much as possible. Keeping up with the newest technology is the way to go and not using it will leave you behind.

Work experience

Nov 2024 - Present
Capitec (Machine learning engineer at Capitec - Value Added Services)

- Machine Learning
- AWS
- Amazon SageMaker
- Python
- Artificial Intelligence
- Amazon EC2
- AWS CLI
- MLflow
- Amazon S3
- Amazon DynamoDB
- Amazon API Gateway

I currently work as a Machine Learning Engineer Level 1 assisting the data scientist in bringing model to production. In addition I also assist the architects in automating various systems and monitoring solutions. I am also greatly involved in assisting and facilitating the team in bringing AI coding best practices up to standard and educating developers in their use.

Jan 2022 - Nov 2024
Capitec (Machine learning engineer)

- AWS
- Linux
- AWS Certificate Manager
- AWS Glue
- Bitbucket
- GitLab
- Amazon SageMaker
- Terraform
- Postman
- Jira
- Amazon S3
- Amazon EC2
- AWS Step Functions
- AWS CLI
- AWS IAM
- Debian
- Machine Learning
- Amazon CloudWatch
- AWS VPC
- A/B Testing
- Jupyter Notebook
- Python

I work as a Level 1 MLE at this point, however, I'm learning new things every day be it directly in my work or via another project I'm doing in my own time. I'm proficient with AWS and Linux, especially in terms of hosting machine learning models.

Troubleshooting is the name of the game since most problems one finds can not be found on the internet. I assist data scientists and data engineers on a regular basis with any issues they might have.

Jan 2017 - Jan 2022

Capitec Bank (Dev Ops Automation Engineer.)

PowerShell Git Jira JBoss EAP WildFly Linux Virtualisation Android

Part of my role included updating the banking app for Android/Apple and MS. I also was responsible for updating the main banking website using code developed by the developers. Making sure good SDLC processes are followed and automating the entire process mostly using PowerShell. Before I started one deployment took about 10 hours. When I left it was automated to run in under 30 minutes. I was also involved in assisting Entersect (the company that hosts the encryption hardware for the bank) in integrating their systems into the flow of the back end app and website as part of authentication.

Sep 2015 - Jan 2017

First National Bank (FNB) (DEV Ops Sysadmin)

Linux PostgreSQL Virtualisation Puppet Bash MySQL CentOS Zabbix Dynatrace Java
WildFly JBoss EAP Apache Spark SSH SSL REST A/B Testing Data Visualisation

I was working in the online credit card division. Specifically the online transaction department. I was responsible for the OPT systems and certificate renewals between the bank and VISA. I also was responsible for creating and maintaining new credit card types such as clicks credit cards that used FNB. Other roles were maintaining and running the Linux infrastructure running Centos or RedHat. This also included maintaining the databases on these systems that stored and processed all the online credit card transactions. I also created a multitude of bash and perl scripts to automate most common tasks and to automatically notify and inform me if something went wrong. System monitoring was also a large part of my role. I also assisted developers in deploying new code to the environment following the SDLC process and partook in daily CAB sessions to get changes in production.

Jan 2015 - Nov 2015

SPI (System Admin and Client Support)

Linux Windows Server Microsoft Hyper-V Bash Unix

I was the technical support for SPI. A company that was a reseller for printing drivers used by universities and other large companies. I was part of installing and maintaining the software as well as helping clients with any issues they might have mostly face to face. as this was before remote working was a thing. I also had to maintain the company's internal IT infrastructure including the website. I worked with Unix/Linux and Windows systems depending on the clients infrastructure.

Feb 2012 - Jan 2015

MTN (Unix Sysadmin)

Linux Ubuntu Debian

I was part of the main team maintaining the IBM AIX system. I created a new server, configured filesystems, did system monitoring, maintained users, configured space for databases, software configurations and installation, set up clusters, and created a script to streamline and automate the configuration and monitoring of about 250+ servers. System performance monitoring and troubleshooting. Setting up DR and doing DR testing. Backup and restoring of servers. Joined in CAB sessions. This also included working on physical servers in server rooms.

Apr 2006 - Feb 2012

IBM (Various Roles - OPS and Linux Sysadmin)

IBM MQ SAP Adaptive Server Enterprise Linux

I started at IBM in operations monitoring, then worked as a technical SME on an internal project before moving over to the internal AIX/Linux team. I also worked with MVS / AS400 Mainframe systems as part of my ops role.

In ops, I was responsible for monitoring various client's infrastructure and sending out alerts if needed. This included checking backup statuses and doing rudimentary administrative tasks on Windows and Linux Servers.

I briefly was part of a portal project as an SME advisor before moving over to the AIX/Linux department then was responsible for MTN's AIX server maintenance.

Jul 2001 - Mar 2006

Discovery Health (DevOps engineer)

- Linux
- Windows NT
- Proxmox Backup Server
- Solaris

I was part of the operations team responsible for system monitoring, backups and restore of data, Linux and Windows user management. Helpdesk support and after-hours onsite monitoring. I worked with Solaris, Linux and Windows servers mostly.

Mar 2000 - Jun 2001
JSE (Operator)

I was a mainframe MVS operator running AS400 systems at the Johannesburg stock exchange. My role was monitoring systems and backups for the DEV/QA and PROD systems.

Mar 1999 - Feb 2000
SARB (Operator)

I was an mainframe operator in the South African Reserve bank working shift hours. My role was to monitor the mainframe servers, do backups via LTO tapes. I also had to monitor the SWIFT network and find and resolve issues between banks in terms of money transfers. I also worked in the TANDEM system that monitored higher level functions of the reserve bank systems.

Education

AWS Machine Learning Specialty	Oct 2023 - Oct 2023
AWS AWS Cloud Practitioner	Oct 2022 - Oct 2022
Red Hat System Admin	Oct 2017 - Oct 2017
IBM System Admin AIX	May 2014 - May 2014
Eldoraine Matric	Jan 2008 - Dec 2008

Personal info

Citizenship: **South Africa**
Authorized to work in: **South Africa**