Iggy de Villiers

Senior Software Engineer (MEng)

Contact

Utrecht
The Netherlands

(+31) 68 2212 698
iggydv12@gmail.com
git://iggydv
git-lab://ignatius
LinkedIn

Languages

English (Fluent)
Afrikaans (Fluent)
Dutch (Conversational)

Programming Languages

Golang, Java,
Python, Ruby,
Kotlin, C, Javascript,
Bash, SQL

DevOps

Docker, Kubernetes,
Terraform, Site
Reliability Engineering
(SRE)

Cloud Experience

Amazon Web Services
(AWS), Google Cloud
Platform (GCP)

Main Technologies

MySQL, PostgreSQL,
NoSQL, MongoDB,
RDS, Redis, SQS,
SNS, HTTP, gRPC,
OpenAPI, Maven,
Gradle, Spring Boot,
Apache Tomcat,
Github, Gitlab,
Datadog, Prometheus,
Apache ZooKeeper

Date of Birth:	31 March 1994
Nationality:	Dutch
Residency:	The Netherlands

I'm a curious, enthusiastic, collaborative engineer with **7+ years** of experience. I'm a lifelong learner and sharing knowledge is my thing. I have a passion for technology, people, and the processes that bring them all together. I have a strong strategic sense and I love solving complex problems with simple solutions, without compromising on the performance and scalability.

Education

2018 → 2021

MEng [cum laude] (Electronic Engineering)   University of Stellenbosch

Thesis: Nomad - A P2P Distributed Storage network for MMVEs

Development Stack:

- Java
- Python
- SQL
- gRPC
- OpenAPI Generator
- Mapstruct
- AWS
- Distributed hash tables (DHTs)
- Kubernetes
- Docker & Docker-compose
- Maven
- RocksDB
- MongoDB
- H2

2013 → 2016

BEng (Electronic & Electrical Engineering)   University of Stellenbosch

Dissertation: Mininet as a Network Emulator

This dissertation focused on measuring how accurately a network emulator (Mininet) can emulate network effects such as bandwidth limitation, packet loss, delay and jitter

---

2008 → 2012

National Senior Certificate   Empangeni High School

Matriculated with distinctions in:

Information technology, Physical Science, Accounting, Afrikaans First Language, English First Additional Language, Life Orientation

Experience

Sept 2022 → present
Senior Software Engineer @ WeTransfer   Amsterdam, The Netherlands

As a key player on the Sudo (Core Services) Team, I contribute to the architecture, implementation, and optimization of WeTransfer's storage, upload, and download services, which affect millions of users around the world. Our main challenge as a team, was finding smart solutions to decreasing storage costs (operational & running costs), reducing carbon emissions of stored data and improving upload & download performance and stability. Our services play a crucial role in WeTransfer's success, by ensuring that users can upload, store and download (share) data efficiently and securely. This makes us a major contributor to maintaining WeTransfer's cost-efficiency, security, and sustainability standards.

Development Stack:
- Golang
- Ruby
- JavaScript & TypeScript
- Github (Actions)
- Event-Driven Systems

- Kubernetes
- Terraform
- AWS (ElasticCache, SQS, SNS, RDS)
- Datadog
- PagerDuty

Reference: Alan Pich (alan@obfu5c8.me / +447782763807)

Apr 2019 → Sep 2022
Software Engineer @ bol.com   Utrecht, The Netherlands

Data Science Team (Jun 2022 - Sep 2022)

As part of the data science team, I assisted in developing a marketing attribution pipeline and machine learning model using first-party data, improving reporting, budgeting, and affiliate payouts for the marketing department.

SEO Team (Apr 2019 - Jun 2022)

As part of the SEO team, I developed high-performance SEO related services to optimize web visibility, specifically through Google, emphasizing clean architecture and robust performance. Our team prioritized customer needs across multiple avenues - from webshop users to API consumers and search engine crawlers. We ensured all features and bug fixes met strict criteria for scalability, security, and future readiness in a rapidly growing e-Commerce environment. Managing hundreds of millions in revenue, our team led technology adoption and spearheaded architectural decisions across the company.

Development Stack:
- Java
- Kotlin
- Python
- Bash
- Groovy
- Spring-boot
- Cucumber
- Apache Beam / Apache Airflow

- Kubernetes
- Docker
- Maven
- GitLab
- Jenkins
- Prometheus
- Grafana
- Google Cloud Platform

Reference: Nathalie Neesen (nneesen@bol.com)

Sep 2017 → Mar 2019
Systems Developer @ Entersekt   Stellenbosch, South Africa

As a backend engineer at Entersekt, I worked closely with developers, QA automation engineers, and product owners to enhance Entersekt's security-focused products. Our team was responsible for the Secure Gateway, enabling banks and security-conscious clients to implement push authentication for transactions. In addition to developing and maintaining AWS AMIs for cloud deployments, we also managed the physical setup of on-premise servers for clients preferring a hardware-first approach, creating automation scripts to streamline installation and provisioning.

Development Stack:
- Java
- Bash
- Python
- Apache Cassandra
- Apache Tomcat
- AWS
- Docker
- Maven

Reference: Tertius Wessels (tertius.wessels@gmail.com)

Internships

Apr 2017 → Sep 2017
Engineering Intern @ Reutech Radar Systems   Stellenbosch, South Africa

As an intern at Reutech Radar Systems, I gained hands-on experience across diverse engineering challenges, including high-frequency design and installation, optical processing, solar tracking for Photovoltaic solar panels, and applying systems engineering principles to large-scale projects.

Experience:
- Systems Engineering
- Professional report writing
- Python
- Data handling & processing
- Software Architecture Design
- Electronic hardware Design
- Firmware Development
- Radio-Frequency Design

Reference: Derick Thiart (dthiart@gmail.com)

Notable Projects

- (WeTransfer) WeGreen Initiative: Achieved a 15% reduction in total storage costs by co-creating the WeGreen initiative, which proposed changes to the default storage duration for transfers on WeTransfer. This initiative was later adopted company-wide.

- (WeTransfer) Content Scanning Application Optimization: Reduced Kubernetes cluster usage by nearly 20% and achieved significant cost savings by leading the re-implementation of a legacy Crystal-based content scanning application to a Golang alternative. The original service was responsible for 40% of total cluster resource usage, which I identified while investigating failing requests.

Leadership & Social

- Founder of WeTransfer core-services Un-conference (2023-2024)

- WeTransfer Culture Champion (2024)

- Founder of bol.com Knowledge Nibbles (2020-2022)

- bol.com Fleet Meeting Committee (2019-2020)

- Entersekt Social Committee (2018)