Core Skills

- Regular tech stack: Python, Java, Docker, Spark, Snowflake, PostgreSQL, Kafka, Kubernetes, AWS
- Past experience: Argo, RabbitMQ, Kotlin, MongoDB, Ruby
- Additional interests: Rust, algorithmic programming puzzles (e.g. Advent of Code)
- Native proficiency in Dutch, bilingual proficiency in English, basic proficiency in German

EXPERIENCE

Booking.com

Amsterdam

Software Engineer

May 2024 - present

Mobile: $+316\ 20033224$

Outline

Back-end software engineer within Data and Machine Learning Platform.

Key Responsibilities

- Feature development on a Python SDK to interface with big data, leveraging PySpark and Snowflake to manage terabyte-scale tables on a petabyte-scale data platform.
- Saved over \$300k annualized by finding and optimizing inefficient Spark jobs and Snowflake query patterns.
- Finding and resolving cross-service bugs in the migration to a new big data platform while unblocking migration of data workflows.
- Developed and owned an automation to create and sync thousands of Jira issues for migration tasks, making sure they are both actionable and assigned to the correct stakeholder.

Flexport

Amsterdam

Luca 2002 March 2004

Software Engineer

June 2023 - March 2024

Outline

Software engineer in back-end development team using primarily Kotlin responsible for customs clearance of shipments in the European Union.

Key Responsibilities

- Designed, built and supported microservices from scratch to automate filing customs declarations to European customs authorities and process the resulting clearance documents.
- Introduced a new setup for Dockerized component testing to address a blind spot in the test coverage of our projects, and supported the adoption process across all teams in the domain.
- Designed and implemented a service integrating with an external partner to consume live shipment updates for Dutch ports, eliminating the need for brokers to manually poll for updates, saving hours of work each week.

Picnic Amsterdam

 $Software\ Engineer$

January 2020 - June 2023

Outline

(Senior) software engineer in back-end development team using Python (primarily) and Java.

Key Responsibilities

- Took ownership of Python microservice responsible for distributing article information through the backup ecosystem. I took the lead on maintenance, stakeholder management, technical support and new feature developments. To address problems meeting SLAs I took initiative to change the architecture, leading to a significant improvement in Apdex score.
- Architected and implemented a dockerized Python simulation of an automated warehouse. The primary use-case was testing of an in-house warehouse control system, and it featured an API identical to that of the real warehouse. A particularly interesting challenge was integrating a virtual event heap-based timeline with asynchronous communication with a system unaware of this timeline.
- Contributed to the in-house warehouse control system (Java) and participated in an on-call rotation, providing operational support to ensure system reliability and rapid issue resolution.
- Contributed to the architecture of an event-driven Python microservice for management of product information data.

Picnic

Data Engineer

June 2018 - January 2020

Amsterdam

Outline

Python and SQL developer in Data Engineering team.

Key Responsibilities

- Wrote automated solution in Python for large scale database migration of Tableau workbooks and data sources.
- Developed a Python module from scratch to extract data from backend systems and load it into a Data Vault model.
- Managed workflow deployments in Kubernetes cluster, using Argo for scheduling.
- Continued development on Data Vault and dimensional database models.
- Developed programmatic data lineage tool, tracing fields in Tableau dashboards back to source underlying the date warehouse.
- Developed and maintained forecasting framework for promotion performance, integrated with SalesForce.

MIcompany

Amsterdam

Working student

August 2016 - December 2017

Outline

Broad ranging role in the technical team, with duties ranging from data engineer tasks to occupying a technical role in the development of web applications in Python and Golang.

Universiteit van Amsterdam

Amsterdam

Teaching Assistant

February 2017 - April 2017

Outline

Teaching assistant position in the Introduction to Computational Science course, responsible for guiding project work, assisting students, and grading coursework.

EDUCATION & TRAINING

Universiteit van Amsterdam, Amsterdam

August 2015 - March 2018

MSc, Computational Science

Program Outline

Study focused emergent behavior in complex systems, and how to build computational models to simulate and understand their behavior. Shares overlap in courses with the Artificial Intelligence master. Internship with the Van 't Hoff Institute for Molecular Sciences Represented the UvA in the Benelux Algorithm Programming Contest.

University College Roosevelt, Middelburg

August 2012 - June 2015

BSc, Liberal Arts & Sciences

Program Outline

Study following the Liberal Arts & Sciences educational model, which exposes students to a wider range of courses than a regular bachelor, and promotes interdisciplinary studies. Graduated cum laude with a semester worth of extra credits in the normal 3 years. Majored in computer science and ecology,