### Ilja Umov

Data Engineer

#### **SUMMARY**

## Software development in data & analytics projects, including handling of the associated aspects like builds, deployments and cloud infrastructure.

#### **SKILLS**

- Python, Java, SQL, Snowflake
- Airflow, dbt, Looker
- AWS, Terraform, Docker, Kubernetes
- ctypes, Cython, pybind11, JNA, CMake

#### **EXPERIENCE**

Set up AWS account for data engineering projects from scratch

Tech stack: Python, AWS, Kubernetes, Docker, Linux, ClickHouse, Dagster, OpenMetadata

Data warehouse development for a client organization

- Analyzed data and created data models using dbt
- Implemented ETL workflows to extract data from different systems
- Created continuous integration setup for data projects
- Researched, advocated for, and implemented various data platform improvements
- Assisted other teams with using data platform components

Tech stack: Python, SQL, Snowflake; Airflow, dbt, Looker; AWS, Terraform, Docker, Kubernetes

Engineering work as part of machine learning projects

- Handled DevOps and integration parts of the projects
- Created Docker images for builds, local development and production deployments
- Set up AWS infrastructure using Terraform
- Configured CI/CD pipelines for builds, automated testing and deployments

Tech stack: AWS, Terraform, Python, conda, Airflow, Docker, make, Bash, Bitbucket Pipelines

Python and SQL development in data warehouse team

- Designed and implemented service for internal credit scoring and performed related data analysis
- Extended functionality of internal data processing and synchronization framework
- Implemented multiple ETL pipelines, starting from gathering requirements to production monitoring
- Started multiple experimental projects: data copying tool to transfer customer data between different databases, credit scoring calculation service in Kotlin, Python bindings for of MySQL Workbench parser

Tech stack: Python, Flask, OpenAPI, MySQL, Java, Kotlin, Vert.x, Docker

#### EDUCATION LANGUAGES

**MSc Computer Science**, Tallinn University of Technology; 2016 - 2017\*

• First year of studies completed; dropped out

BSc Computer Science, Tallinn University of Technology; . 2010 - 2016

- Was awarded IT Academy scholarship during four semesters
- Thesis topic: "Development of automated tests for consumer loan system"

High School Diploma, Kadrioru Saksa Gümnaasium; ............. 2010

- State exams: Math: 96%, Geography: 93%
- German: 94%, English: 91%, Estonian: 80%

# English Estonian Russian German

#### **EXPERIENCE CONT.**

**Software Developer**, Versobank AS; *Tallinn, Estonia* ...... *Jun 2017 - May 2018* 

Banking system development, implementing reports using Python and Oracle PL/SQL

- Implemented services for digitally signing bank orders and PDF generation
- Created PyCharm plugin for custom template language

Tech stack: Python, Oracle PL/SQL, Java, Vert.x, reportlab

Software Developer, Tieto Estonia AS; Tallinn, Estonia ...... Jun 2016 - Apr 2017

Banking system development using Python and Oracle PL/SQL

- Extended functionality of existing codebase, including work on unit, integration, and UI tests
- Wrote shell scripts to automate common development tasks
- Evaluated technical solutions to migrate codebase from SVN to Git

Tech stack: Python, Oracle PL/SQL, Fabric, Selenium, py.test

Test automation using Java, Selenium and SoapUI

- Created framework for end to end testing of web application: combining UI tests, executing SQL queries, and calling SOAP services in same codebase
- Performed functional and performance testing of web services

Tech stack: Java, Selenium, JMeter, SQL, SOAP, SoapUI

QA Engineer, FOB Solutions OÜ; Tallinn, Estonia ....... Jun 2014 - Oct 2014

Testing mobile mapping application on iOS and Android, reporting and tracking found issues.

Also created prototype project to evaluate possibility of automating some test cases for Android version.

Developed software to automate testing of mobile phones using Python and C++

- Created graphical user interface for nose test runner using PySide
- Implemented object recognition functionality using OpenCV and SimpleCV
- Wrote python wrappers for C/C++ libraries: tesseract-ocr, NI-DAQmx and Basler SDK
- Got libimobiledevice working on Windows using Cygwin and Cython
- Initially wrote Python test scripts to automate testing of set-top boxes.

Tech stack: Python, ctypes, C++, PySide, OpenCV, NumPy, SciPy