# **VIKTOR CSOMOR**

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#### SUMMARY

Software engineer with hands-on experience and an avid interest in software design, machine learning, and parallel computing. Proficient in Java, C++, and Python. Contributed to the development of complex applications and data pipelines. Fascinated by mathematics, statistics, and theoretical computer science. Passionate about optimal solutions and efficient, maintainable code.

## **WORK EXPERIENCE**

#### Sep 2018 – present: Software Engineer (Machine Learning), Skyscanner, Edinburgh

Contributed to the development of a large-scale data pipeline and backend application for the collection, aggregation, and evaluation of a specific business metric of strategic importance using distributed computing technologies such as Java Spark and the AWS ecosystem.

Currently working alongside a data scientist and a team of software engineers on the development of a complex machine learning pipeline dealing with massive amounts of data for the prediction of flight searches on Skyscanner using PySpark, pandas, and scikit-learn.

## Apr 2017 - July 2018: Build and Configuration Engineer, Allianz Technology, Vienna

Developed and maintained plug-ins for an Eclipse IDE to support remote development on a Linux host environment and refactored large portions of the old codebase greatly improving code quality.

Developed both the Java backend and the Angular web frontend prototype of a build report system successfully adopted by developers and build managers company wide.

Implemented a RESTful Java web service backed by a native process pool for the execution of external DB2 stored procedures significantly increasing scalability and reducing response times.

## Sep 2016 – Mar 2017: Software Development Intern, Allianz Technology, Vienna

Implemented a secure interactive shell command executor for remote Linux machines, developed Eclipse plug-ins, and provided support and troubleshooting for users of the plug-ins.

## **PERSONAL PROJECTS**

**<u>DETROID</u>**: A Java chess framework featuring a Universal Chess Interface adapter, a JavaFX GUI, parameter optimization support, and a principal variation search driven chess engine.

<u>C-ATTL3</u>: A C++ deep learning library for the construction and optimization of neural networks ranging from simple feedforward architectures to state-of-the-art convolutional ResNets and LSTMs.

**PP4J:** A multiprocessing library for Java that features process pool implementations and a flexible API.

**OSML:** A Python library of machine learning algorithms ranging from logistic regression and weighted knearest neighbours to naïve Bayes models, support vector machines, and random forests.

## SKILLS

Java: Oracle Certified Java 8 Professional, Spark, JNI, JNA, JavaFX, SWT, JUnit, Mockito, Maven, Gradle, Eclipse, IntelliJ IDEA

C++: C++11, STL, CUDA, CuBLAS, CDNN, Eigen, GCC, Clang, GNU Make, Doxygen, Google Test, Eclipse CDT

Python: Python 3.x, NumPy, Pandas, PySpark, Matplotlib, Scikit-learn, Keras, Pytest, PyCharm

Others: SQL, AWS, Travis CI, Drone, JIRA, Linux, Windows, MacOS, UML

## **EDUCATION**

2019 – 2020: University of Edinburgh – High Performance Computing with Data Science MSc

2014 - 2017: University of Applied Sciences Technikum Vienna - Business Informatics BSc (GPA: 3.5)

## **LANGUAGES**

**English:** Full professional proficiency (IELTS Academic: **8.5**)

**German:** Elementary proficiency **Hungarian:** Native proficiency