Mattackerstrasse, 1 Wetzikon ZH 8620 Switzerland

# Ing. Marek Marušic

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## Languages and Technologies

- Proficient: C#.NET; Python; SQL; Docker; Kubernetes; Azure Cloud; Git
- Prior Experience: Java; Angular; C++; OpenMPI; Terraform; Helm; Bash; Linux
- Natural Languages: English (Fluent), Slovak (Mothertongue)

### **Employment**

#### **Software Engineer**

## **Loepfe Brothers**

Oct 2019 – Present

## **IoT Solution for yarn sensors** – C#.NET, Azure IoT

- Created services to process sensor run-time data on edge servers and send it to the cloud for further analysis.
- Support new colleagues with the understanding of our projects.

# Cloud infrastructure – Terraform, Kubernetes, Azure, Docker, Helm

- Designed and implemented pipelines to deploy our infrastructure and services to the Cloud.
- Reduced time to set up CI/CD for new services by 50%.
- Help, advise, and educate team members on CI/CD topics.
- Improved and designed release processes for our projects to avoid regressions and increase release speed.

# **Production Data Collector** – C#.NET, Angular, MongoDB

• Increased traceability of produced devices by implementing automatic upload of the system information.

#### Data analysis – Python, Bokeh

• Created a simulation of algorithms to compare their effectiveness in handling decreasing sensor accuracy.

## **Associate Software Engineer**

# Red Hat CZ

Jan 2018 - Sep 2019

- Optimized performance by 30% and memory use by 50% of an existing NLP model for support cases classification and prepared a Docker image with GPU support for easier deployment.
- Optimized performance and JVM stack usage of a query parameter processing in RESTEasy framework.
- Built features to obtain SSL certificates from Let's Encrypt and improved the user experience of CLI in the JBoss EAP.
- Mentored new trainees in the team.

# Software Engineer, Intern

#### Red Hat CZ

Apr 2017 - Dec 2017

• Developed various features for internal tools using Java and Java EE technologies to improve code reviews and PR quality.

# Software QA, Intern

# Red Hat CZ

Aug 2014 – Mar 2017

• Development of various automated tests for security components (OpenSSH, Firewall, Network) in Red Hat Enterprise Linux in Bash and Python.

#### **Education**

#### Brno, CZ

# **Brno University of Technology**

2013 - 2018

- Master's degree in Bioinformatics and biocomputing, Faculty of Information Technology, June 2018.
- Bachelor's degree in Information Technology, Faculty of Information Technology, June 2016.

## **Technical Experience**

### **Projects**

- Automation of MITM attack for SSL/TLS decryption (2016). Tool for setup and startup of SSL/TLS interception. An article about it was published and presented at the Excel@FIT conference. Python, C
- Customer support case analysis with deep neural networks Updated, improved and compared existing models NLP models as part of my Master's thesis. Python, Keras, NLP
- **CPU heat map simulation** (2017). Parallel simulation of a CPU heat map on a Czech supercomputer scaled on multiple CPUs across the cluster. The performance was one of the best in class. C++, OpenMPI

- Collaborative whiteboard (2015). Whiteboard where multiple users can view and simultaneously draw with each person's edits synchronized. Javascript, WebSockets
- **Workout buddy** (WIP). Prepare your workout plan before a workout. While working out you can track reps, sets, and time the breaks. C#, Angular