



Soma Veszelszki

Nationality: Hungarian **Date of birth:** 27/03/1995

Phone number: (+36) 209371055

Email address: soma.veszelovszki@gmail.com

Facebook: <https://www.facebook.com/soma.veszelovszki>

LinkedIn: <https://www.linkedin.com/in/soma-veszelovszki/>

Website: <https://soma.veszelovszki.hu>

Home: Budapest (Hungary)

ABOUT ME

I'm a 28 year-old software engineer, located in Hungary. In my free time I usually go hiking with my wife, hang out with my 9 siblings, watch movies or do some sports - I regularly play ice-hockey and I recently took up climbing.

Professionally, I have 5+ years of experience with low-latency programming in C++. I'm a big fan of autonomous driving, I spent 4 years of my professional career in that domain. Also, my favourite home project is a model car that is able to perform some self driving tasks.

Although my previous experience is mainly in low-latency domains requiring C++, I'd like to broaden my perspective. Therefore, I dedicated the last couple of months to experimenting with new technologies in the form of home projects. Amongst others, I wrote an Android application in Kotlin, I implemented the popular Snake game in Python and tried out Rust. In the future, I'd like to try myself out in some new areas of programming.

EDUCATION AND TRAINING

Master's degree, Electrical and Electronics Engineering

Budapest University of Technology and Economics [04/02/2018 – 19/01/2020]

Field(s) of study: Engineering, manufacturing and construction: *Electronics and automation*

Final grade: Summa cum laude

Thesis: Development of Navigation Methods in Dynamic Environment for an Intelligent Model Car

Bachelor's degree, Electrical and Electronics Engineering

Budapest University of Technology and Economics [31/08/2014 – 14/01/2018]

Field(s) of study: Engineering, manufacturing and construction: *Electronics and automation*

Final grade: Summa cum laude

WORK EXPERIENCE

C++ Developer

Maverick Derivatives [05/2021 – 01/2023]

City: Amsterdam

Country: Netherlands

Website: <https://www.maverickderivatives.com/>

About the company

Maverick Derivatives is a proprietary trading company that develops its own in-house platform for connecting to several exchanges. Because of the relatively small staff size, developers were expected to design, implement, test, deploy and maintain their applications, and react to the traders' feedbacks quickly.

My role

Together with another developer, I was responsible for the development of a low-latency trading server component, that accumulates market data from multiple sources, maintains asynchronous communication with

other internal components and sends large amount of information to its own GUI component. Since I had no prior experience with deploying and maintaining backend servers and the required infrastructure, and I also didn't have any trading-related knowledge, the learning curve was extremely steep at the beginning, which was probably the biggest challenge I had to face during my career so far.

Technologies

1. C++ 17/20
2. Boost ASIO
3. CMake, Conan package manager
4. GitLab CI, Linux basics
5. SQL, liquibase
6. HTTP, Rest API, JSON, Google Protobuf

Required soft skills

1. Ability to handle high-pressure situations
2. Communicate effectively with people from different domains
3. Meet high expectations of working speed and performance

Software Engineer

Almotive [07/2017 – 04/2021]

City: Budapest

Country: Hungary

Website: <https://aimotive.com/>

About the company

Almotive's main profile is AI-based self-driving car software. The AI training, software framework and control development and the on-road testing is all done internally.

My role

Within the company, I was working on a Drive-by-Wire solution that acts as a gateway between the company's autonomous driving software and the vehicle. By providing a uniform drive interface, it allows the high-level software to maintain control over different vehicle platforms transparently. As this unit is the lowest layer of the self-driving stack, it is required to operate real-time, perform low-latency signal routing and have a robust software architecture.

My responsibilities entailed the full design of a task manager based on a real-time OS, the implementation of a low-latency inter-task communication utility and the management of the communication protocol that connects the unit to the high-level software.

Technologies

1. Embedded C, C++11/14
2. Real-time embedded operating systems
3. Communication protocols (Ethernet-UDP, CAN)

Required soft skills

1. Creative thinking when it comes to problem-solving
2. Effective teamwork, as most of the solutions needed to be agreed by the whole team

Android Developer

Cartographia [06/2016 – 06/2017]

City: Budapest

Country: Hungary

Link: <https://play.google.com/store/apps/details?id=hu.cartographia.funiq.ujbuda&hl=en&gl=US>

About the company

Cartographia is Hungary's largest map printing company with a history of over 60 years. Feeling the need for digitalization, they built an online database of maps, hiking/cycling tracks and articles about interesting places in Hungary.

My role

I developed an Android application that enables users to search among the hundreds of articles and download the GPS tracks for navigation. It is also compatible with the company's traditional paper maps, by providing real-time information about the features on the map, using augmented reality (AR). Working with the Android framework helped me understand what makes an API scalable and easy-to-use, I still use some of its concepts when designing interfaces. I am also glad that I got to work with a high-level language such as Java to see its advantages and disadvantages over C/C++.

Technologies

1. Java
2. Android framework
3. SQLite database
4. Vuforia Augmented Reality Engine

Required soft skills

1. Communicate with people without any developer background, and create requirements accordingly
2. Take full ownership of the project I'm responsible for

LANGUAGE SKILLS

Mother tongue(s): **Hungarian**

Other language(s):

English

LISTENING C1 READING C1 WRITING C1

SPOKEN PRODUCTION C1 SPOKEN INTERACTION C1

PROJECTS

babocar

[09/2018 – 02/2021]

Self-driving car hardware and software

Link: <https://soma.veszelovszki.hu/babocar/index.html>

Mondrian in Random

[04/2023 – 04/2023]

Mondrian-style wallpaper generator for Android

Link: <https://soma.veszelovszki.hu/mondrian-in-random/index.html>