## DANIEL SPAREMBLEK

Pursuing MSc in Computer Science (Artificial Intelligence)

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### **EXPERIENCE**

# Network Operations Intern Croatian Academic and Research Network

Aug 2020 - Sep 2020

♥ Zagreb, Croatia

- Configured MikroTik routers and created a script for automated network speed testing
- Technologies used: Python and Expect (Tcl extension) for automated scripting; RouterOS for local storage and log files on MikroTik routers; PHP, JavaScript, JQuery (with AJAX), and HTML for front end web interface
- Field work: setting up new infrastructure in schools, universities, and institutions
- Result: Web interface for automated network speed testing per router IP

# Research and Development Intern Alfatec Group

₩ Jun 2020 - Aug 2020

♥ Zagreb, Croatia

- Supported an R&D Project by researching NoSQL and SQL GPU databases to determine what infrastructural requirements need to be met
- Liaised with research professors
- Result: Reported on infrastructural requirements and improvements to BI Team Lead to help company partners (e.g., Al/automation, Robotics, retail, ecommerce) to support data analysis and data warehouse maintenance

#### Full Stack Development Intern Erste Group Card Processor

## Aug 2019 - Sep 2019

♥ Zagreb, Croatia

- Built a new Single Page Application for internal company purposes
- Technologies used: Java, Spring Boot, TypeScript (Angular framework), SQL (PostgreSQL and Oracle databases)
- Result: Connecting back end and front end services with nested JSON parsing on frontend

## **EDUCATION**

# MSc in Computer Science, AI option (120 ECTS expected) KU Leuven, Faculty of Engineering Science

di Oct 2021 – Jun 2024 (expected)

• Optiver's TraderHack 2022 (hackathon in Python) – finished 6<sup>th</sup> out of 110 teams

#### MSc in Computer Science

#### University of Zagreb, Faculty of Electrical Engineering and Computing

₩ Oct 2020 - Sep 2021

**♀** Zagreb, Croatia

- Preparation for MSc Thesis: Overview of Tools for Physically Based Rendering Blender scripting in Python
- Member of the organizational team (IT Sector) for STEM Games 2021

### BSc in Computer Science (190.5 ECTS)

#### University of Zagreb, Faculty of Electrical Engineering and Computing

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**♀** Zagreb, Croatia

- BSc Thesis Tracking of a Human Body in Motion using OpenPose Library
- Tutored students in Mathematics, Physics and Programming

### **PROJECTS**

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- IoT project developed in C++ (Arduino) linking two microcontrollers in LED lamps so they can communicate anywhere in the world
- Open-source project on GitHub

# Festivizer Lead Developer

🛗 Oct 2019 - Jan 2020

- Android application developed in Java for easy festival organization
- Selected 5<sup>th</sup> out of 63 student teams in course Software Design

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#### **Lead Developer**

- 3D video game developed in C# using Unity
- Selected 3<sup>rd</sup> out of 15 student teams in course Fundamentals of Digital Game Development

#### BeerBrewer Lead Developer

mar 2019 - Jun 2019

- Android application developed in Kotlin for brewing beer
- Project as a part of course Application Development for Android OS

### **SKILLS**

Languages: Python, Java, C++, SQL, C, C#, Perl, Kotlin, Prolog, Haskell, MATLAB, PHP

**Technologies:** Git, Firebase, Flask, Linux, Blender, LaTeX, Spring Boot, Angular, Visual Paradigm (UML), OpenGL, Google Cloud, OpenCV, Keras (Tensorflow)

#### **Relevant Coursework:**

Algorithms and Data Structures | OOP
Distributed Systems | Linear Programming
Nonlinear Optimization | Databases
Android Development | Machine Learning
Computer Vision | Data Mining
Discrete Mathematics | Operating Systems
Theoretical Computer Science | Compilers
Network Programming | Computer Graphics
Probability and Statistics
Software Architecture
Modelling of Complex Systems