### **EDIN GUSO**

Lausanne, Switzerland (Open to relocation)
Email: edinguso@gmail.com | Website: edinguso.github.io
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### **SKILLS**

**Programming Languages:** Python (*Advanced*), C++ (*Advanced*), C (*Intermediate*), Java (*Intermediate*), C# (*Intermediate*), MATLAB (*Intermediate*), JavaScript (*Beginner*)

**Technical Skills:** SQL, Elasticsearch, MongoDB, LLMs, Prompt Engineering, RAG, Agile, Git **Language:** Bosnian-Croatian (*Native*), Turkish (*Native*), English (*TOEFL:* 116/120), French (A2)

### **EDUCATION**

**EPFL** - Lausanne, Switzerland

*Sep 2021 - Sep 2024 (Expected)* 

M.Sc. in Computer Science, Specialization in Computer Science Theory

- Cumulative GPA: **5.53/6.00**
- Relevant courses: Distributed Algorithms, Concurrent Algorithms, Advanced Algorithms, TCP/IP Networking, Applied Data Analysis, Machine Learning, Computer Vision

### Sabanci University - Istanbul, Turkey

Sep 2016 - Jun 2021

B.Sc. in Mechatronics Engineering and B.Sc. in Computer Science

- Cumulative GPA: **3.96/4.00**
- Thesis: Application of autoencoder neural networks for CFD Problems (Supervisor: Prof. Serhat Yesilyurt)

### WORK EXPERIENCE

Logmind - Lausanne, Switzerland

Feb 2024 – Ongoing

### **Data Scientist / AI Engineer (Master Thesis)**

- Designed the SmartSearch pipeline using LLMs and embedding models. This pipeline combines the strengths of traditional querying and semantic search empowering users to search their log data with increased detail, while offering a simple and intuitive natural language interface.
- Lead the development of generative AI projects.
- Maintained a modular **Python** package that simplifies LLM-powered app development.

### Logmind - Lausanne, Switzerland

Aug 2023 - Feb 2024

### Junior Data Scientist / AI Engineer

- Implemented Natural Language to SQL and Natural Language to Elasticsearch translators, enabling users to query logs using natural language.
- Implemented an app that generates explanations and recommendations for logs, decreasing the time required to troubleshoot IT issues.
- Developed a modular **Python** package that simplifies LLM-powered app development.

### EPFL - Lausanne, Switzerland

Sep 2022 - Jan 2023

### **Student Assistant (TCP/IP Networking)**

- Beta tested the labs to ensure no bugs or ambiguities were present.
- Assisted students with their weekly lab assignments and answered their Virtual Box, Wireshark, and Networking related questions.

## University of Texas at Austin - Austin, TX, USA

Jul 2019 - Aug 2019

### **Summer Intern in Autonomous Systems Group**

• Implemented a Graphical User Interface (GUI) using Qt Creator (in C++) for automated mission planning and controller synthesis.

### SELECTED PROJECTS

EPFL - Lausanne, Switzerland

Feb 2023 - Jul 2023

# **Efficient Computation of Worst-Case Delay-Bounds for Time-Sensitive Networks** [LINK]

Supervisor: Prof. Jean-Yves Le Boudec

- Reviewed the literature on computing worst-case delay-bounds in time-sensitive networks.
- Designed a heuristic algorithm for selecting cuts in the PLP algorithm and implemented it in Python.
- Demonstrated the algorithm's effectiveness in approximating optimal worst-case delay bounds.

### EPFL - Lausanne, Switzerland

Sep 2022 - Dec 2022

### **Distributed Algorithms Term Project** [LINK]

- Implemented perfect links, uniform reliable broadcast and lattice agreement using UDP in
- Achieved 3M+ message throughput on perfect links level.

#### **EPFL** - Lausanne, Switzerland

Sep 2022 - Dec 2022

### **Concurrent Algorithms Term Project** [LINK]

- Implemented software transactional memory using the TL2 algorithm in C.
- Achieved x2.918 speed up compared to the reference solution using a single global lock.

### **EPFL** - Lausanne. Switzerland

Feb 2022 - Jul 2022

## Sublinear Tolerant Max Cut Tester for Bounded Degree Expander Graphs [LINK]

Supervisor: Prof. Michael Kapralov

- Reviewed the literature on sublinear testers for bounded degree graphs.
- Extended a previously published bipartiteness tester to a tolerant max cut tester.
- Analysed the algorithm's time complexity and proved its correctness.

### ADDITIONAL EXPERIENCE

### **Team Leader, Competitive Gaming (Squad)**

Oct 2020 - Ongoing

- Leading a team of 60+ members, demonstrating strong leadership, communication, and organizational skills. Managing and moderating the team Discord server with 650+ members.
- Organizing regular practice matches and training sessions. Communicating with other team representatives and tournament organizers.

### VOLUNTEER WORK

Sabanci University - Istanbul, Turkev **CIP** (Civil Involvement Project)

Sep 2016 - Dec 2016

- Visited a rest home every week and communicated with elders.
- Established meaningful relationships through the conservations we had and the games we played.

### **HONORS AND AWARDS**

Sabanci University - Istanbul, Turkey

- Dean's High Honor List
- Awarded with 50% scholarship for achievement on SAT exam
- Awarded with "Sakip Sabanci 100% Encouragement Scholarship"