

DŽENAN KREHO

 dzenankreho.github.io

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TECHNICAL SKILLS

Programming languages:

C/C++

MATLAB

Python

Java

Assembly

LabVIEW

PLC programming:

LD

FBD

SFC

ST

Frameworks and libraries:

FreeRTOS

JUnit

CMSIS-DSP

Qt

OpenCV

Tools:

Simulink

Git

CMake

Linux

Doxygen

IDEs:

CLion

Visual Studio

PyCharm

IntelliJ IDEA

Code Composer Studio

Keil uVision

MPLAB X

LANGUAGES

Bosnian: **Native**

English: **Fluent**


Swedish: **Elementary**

German: **Elementary**

EDUCATION

Master of Electrical Engineering
with Specialization in Automatic Control and Electronics

University of Sarajevo, Bosnia and Herzegovina

 Oct 2022 – Sept 2024

- Received the University of Sarajevo Silver Badge in acknowledgment of academic achievement.

Master of Science in Computer Science
with Specialization in Embedded Systems


Mälardalen University, Sweden

 Aug 2023 – Jun 2024

- Obtained through the Erasmus+ International Credit Mobility programme.

Bachelor of Electrical Engineering
with Specialization in Automatic Control and Electronics

University of Sarajevo, Bosnia and Herzegovina


 Oct 2019 – Sept 2022

- Received the University of Sarajevo Silver Badge in acknowledgment of academic achievement.

EXPERIENCE


HVDC Control & Protection Software Engineer

Hitachi Energy

 Jan 2025 – Present

Master's Thesis Student

Volvo Construction Equipment

 Jan 2024 – May 2024

- Worked on a Master's thesis that focused on functionality allocation, timing analysis, and schedulability analysis of multi-core ECUs.
- Developed a tool in C that implements the specified analysis and techniques.

Student Researcher

University of Sarajevo, Faculty of Electrical Engineering

 Nov 2021 – Feb 2023

- As part of a research project, worked on the GUI component of a real-time simulator for smart grid networks.
- Wrote C++ code that uses the Windows App SDK, GTK 4, and 3D rendering APIs: OpenGL and Vulkan.
- Performed performance testing, documented the results, and documented the development process in the form of beginner tutorials to assist other project team members in the future.

Undergraduate Teaching Assistant

University of Sarajevo, Faculty of Electrical Engineering

 Mar 2022 – Jun 2022

- Conducted, assisted students with, and graded laboratory exercises for the courses:
 - Programming Techniques (C++ and object-oriented programming)
- Lab work in Automatic Control and Informatics (Data acquisition and control using acquisition cards and PLCs)