





# DŽENAN KREHO

 dzenankreho.github.io  
 dzkreho@gmail.com  
 dzenankreho  
 dzenankreho

## 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**

German: **Elementary**

## EDUCATION

Master of Electrical Engineering  
with Specialization in Automatic Control and Electronics  
University of Sarajevo, Bosnia and Herzegovina


 Oct 2022 – Sept 2024

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

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)