



TÕNIS LUSMÄGI

COMPUTER ENGINEER

ABOUT ME

Computer and Systems Engineer
from Tallinn with 7 years of
experience

CONTACT

+372 5455 6942
tonis.lusmagi@gmail.com

lusmagi.com
LinkedIn/tonis-lusmagi
GitHub/tonis-lusmagi

FOCUS

EMBEDDED SYSTEMS

HARDWARE

SOFTWARE

EDUCATION

MA - COMPUTER AND SYSTEMS ENGINEERING @ TALTECH

September 2017 – June 2019

I graduated in Computer and Systems Engineering from TalTech. I design Digital Systems - Systems-on-Chip. I'm proficient in Verification, Validation and Testing. Next to Computer Hardware Development, I'm competent in Automation, Software Engineering, Machine Learning and more. My main programming languages are C, C++, Bash, Python and VHDL. I wrote my master's thesis on Intel SGX performance & security, independently discovering MDS (Microarchitectural Data Sampling) speculative execution vulnerability known as RIDL (Rogue In-Flight Data Load).

BA - ELECTRICAL ENGINEERING @ TALLINN UNIVERSITY OF APPLIED SCIENCES

September 2013 – Juuni 2017

I graduated Cum Laude in Electrical Engineering from Tallinn University of Applied Sciences. I studied Electrical- and Control Systems Design from Electronics to High Voltage. I have electrician's A-level competency and Electrical Engineering EQF Level 6. I wrote my diploma thesis on Battery Systems for Electric Aircrafts.

COMPTETENCIES

- **Operating Systems:** Windows, **Linux**, Android
- **Office:** Microsoft Office, LibreOffice, WPS Office
- **Programming:** C, C++, C#, Python, Bash, Java, VHDL, SystemVerilog,
 - SystemC, SQL, Structured Text, MATLAB, Simulink, CoDeSys, Rust
- **Programming (learning):** Go
- **Libraries & Frameworks:** ROS2, Boost, CMake, QT, OpenCV
- **EDA tools:** Xilinx Vivado, Mentor Graphics ModelSim/QuestaSim
- **Electronics CAD:** Autodesk EAGLE, KiCad
- **2D CAD:** Autodesk AutoCAD, CADS Planner
- **3D CAD:** Autodesk Fusion 360, Solid Edge, Rhino
- **Development Boards:** AVR, FPGA
- **Audio-Video-Photo Editing:** Adobe Premiere, Adobe Photoshop, GIMP
- **Languages:** Estonian (native), English (C1), German (A1)
- **Interpersonal Skills:** adept communication, collaborative work experience
- **Leadership Skills:** software project leading, team leading, business leading

WORK EXPERIENCE

SOFTWARE DEVELOPER @ MILREM ROBOTICS

May 2019 – present

Milrem Robotics manufactures unmanned ground vehicles for defense- and security forces, commercial and industrial clients, and rescue services. Milrem Robotics' THeMIS and Multiscope UGVs have gained worldwide recognition. Milrem Robotics has unveiled the next generation Robotic Combat Vehicle – Type-X.

RESEARCH & DEVELOPMENT INTERN @ NIXOR

June 2016 – August 2016

Electronics Design and Software Development for embedded systems.