

*Versatile engineer spanning soft real-time software in C#, distributed cloud-edge computing, computer vision & machine learning, embedded & FPGA development, and Linux hacking from kernel to userspace.*

## Experience

- 2009 – Present **Researcher • Systems architect • Backend developer**, Softra, UAB, Vilnius, Lithuania.  
Architecture and development of high-reliability integrated software/hardware systems — from real-time embedded components and computer-vision pipelines (license-plate recognition) to high-performance, highly concurrent .NET services on a custom actor-model framework. Full ownership through to the Linux / Windows deployment infrastructure.
- 2024 – 2025 **Software architect, Embedded software engineer**, Kongsberg NanoAvionics, Vilnius, Lithuania.  
Embedded C++ software architecture for nanosatellite payload controllers — resource-constrained Linux systems.
- 2009 – 2018 **Assistant professor**, Vilnius Gediminas Technical University, Vilnius, Lithuania.  
Taught VHDL / Verilog hardware-description languages and computer architecture; supervised student research.
- 2006 – 2011 **Software / HDL engineer**, Semiconductors Research, Vilnius, Lithuania.  
Integrated-circuit reverse engineering and analysis: image processing & computer vision, differential power analysis, and hardware cryptographic analysis; custom analysis tooling in VHDL, C, C#.
- 2004 – 2006 **Software engineer**, Lithuanian Veterinary Academy, Kaunas, Lithuania.  
Intranet web-application development using PHP and PostgreSQL.

## Education

- 2006 – 2010 **PhD, Microelectronics**, Vilnius Gediminas Technical University, Vilnius, Lithuania.  
advisor: Prof. Romualdas Navickas  
thesis: Development and Analysis of Integrated Circuit Topology Elements Recognition System
- 2000 – 2006 **MSc, Computer Science**, Kaunas University of Technology, Kaunas, Lithuania.  
advisor: Prof. Eduardas Bareiša

## Technical Experience

### Proficient With

- languages: C#, C/C++, SQL
- technologies: .NET Core, Linux (RHEL / AlmaLinux / Fedora), Git, PostgreSQL, ZFS, KVM / libvirt, Redis, gRPC, Docker / Podman, Ansible
- fields: Image processing & computer vision, license-plate recognition, high-performance concurrent algorithms, cross-platform & real-time systems

### Have Experience With

- languages: Python, VHDL, Verilog, JavaScript / TypeScript, Bash, Go, Perl, PHP, Java, Tcl, LaTeX
- technologies: Embedded Linux, FFmpeg, OpenCV, TensorFlow, Jenkins, Traefik, MySQL
- fields: Embedded & real-time systems, FPGA development, machine learning & neural networks, hardware / IC security (cryptographic & differential-power analysis), DevOps / CI/CD, distributed computing

## Languages

- |            |           |                                                |
|------------|-----------|------------------------------------------------|
| Lithuanian | Excellent | Mother tongue                                  |
| English    | Very good | Proficient in spoken and written communication |
| Russian    | Basic     | Basic spoken and written communication         |

## Interests

- interests: IT industry news • Self-hosting • Home automation • Formula 1 • Tennis • EUC