# Oleksandr Hubanov

Dum spíro, spéro

System-level Principal Software Engineer with product ownership experience and deep expertise in performance-critical C/C++ systems across embedded platforms and IBM z/OS environments. Leads architecture, modernizes legacy systems, and mentors engineers while delivering reliable, scalable monitoring and diagnostic solutions.

## Contacts

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## Skills

IBM z/OS, Embedded Linux, ARM

C/C++ (system-level), C#, Java, Python, HLASM, Verilog, MATLAB

REST, gRPC, OpenTelemetry

Valgrind, Wireshark, IPCS, z/XDC

Git, Jenkins

## Languages

English (C1)
Lithuanian (A2)
Ukrainian (native)
Russian (native)

## Hobbies

Classical guitar
Night driving
3D printing
Bicycling

## Experience

**Rocket Software** — Vilnius, Lithuania
*Principal Software Engineer* — Mar 2025 – Present

- Lead architecture and technical direction for performance-critical monitoring and diagnostic components in IBM z/OS and hybrid environments.
- Act as a technical authority across teams, unblocking complex issues involving dumps, diagnostics, protocols, and legacy codebases.
- Mentor engineers and drive cross-team collaboration, raising system-level expertise and delivering reliable, scalable solutions.

*Senior Software Engineer* — Apr 2023 – Mar 2025

- Led modernization of legacy mainframe tooling, introducing RESTful interfaces while preserving performance and reliability guarantees.
- Contributed to architectural decisions and implementation of system-level components in C/C++ and Java within mainframe monitoring systems.
- Actively supported less experienced engineers through code reviews, design discussions, and debugging of complex issues.

*Software Engineer III / II* — Dec 2020 – Apr 2023

- Developed performance-sensitive C/C++ and HLASM components for the OMEGAMON monitoring suite on IBM z/OS.
- Worked extensively with system dumps, protocol handling, and low-level diagnostic tooling.
- Improved delivery reliability through CI/CD contributions.

**Sonderus** — Vilnius, Lithuania
*Software Developer* — Jul 2019 – Dec 2020

- Developed embedded C/C++ software and Linux kernel modules for system-level tools.

**Precizika Metrology** — Vilnius, Lithuania
*Engineer Programmer* — Oct 2017 – Jul 2019

- Designed firmware and calibration systems for precision linear encoders.
- Developed signal processing tools and supporting PCBs for nanometer-level measurement accuracy.

**Vilnius Gediminas Technical University** — Vilnius, Lithuania
*Junior Researcher* — Nov 2016 – Aug 2017

- Supported biomechanics research projects using MATLAB and signal analysis.

**Various Roles (Freelance, Part-time)** — Kharkiv, Ukraine
*System Admin / Electrician / Developer* — 2008 – 2016

- Early technical roles in system administration, hardware support, and embedded integration, building a strong foundation in operating systems and networking.

# Education

**Vilnius Gediminas Technical University (VILNIUS TECH)**  Vilnius, Lithuania
*PhD in Biomechanics (paid scholarship)*  2017 – 2022

- Conducted research in soft tissue biomechanics and EMG signal analysis.

- Actively mentored new PhD students.

**Kharkiv National University of Radioelectronics**  Kharkiv, Ukraine
*Master's in Biomedical Engineering*  2014 – 2016
*Bachelor's in Biomedical Engineering (paid scholarship)*  2011 – 2014

- Focused on medical signal processing and biomedical systems.

**Kharkiv College of Medical Equipment**  Kharkiv, Ukraine
*Specialist Degree in Electronic Medical Equipment Design (with honors)*  2008 – 2011

- Focused on medical electronics, diagnostics, and device servicing.

- Active in student parliament and KVN performance club.

# Publications

- Gubanov A., Zhemchuzhkina T., Nosova T., Nosova Y.
  *On the Methods of Registration of Biosignals for Human Interface Device.*
  19th International Youth Forum "Radio Electronics and Youth in the XXI Century".

- Gubanov A., Zhemchuzhkina T., Nosova T., Nosova Y.
  *Some Technological Solutions of Realization of Human Interface Device.*
  Bulletin of NTU "KhPI", 2015, 62(1171), pp. 52–57. ISSN 2079-5459.

- Gubanov A., Zhemchuzhkina T., Nosova T., Nosova Y.
  *Data Processing Electromyographic Module.*
  Shevchenkivska Vesna 2015: Radiophysics. Electronics. Computer Systems.

- T.V. Zhemchuzhkina, T.V. Nosova, Y.V. Nosova, A.V. Gubanov et al.
  *Statistical Analysis of the Spectral Characteristics of the EMG Signal for the Purpose of Differentiation of Lumbar Pain.*
  Bionics of Intelligence, No. 2(85), 2015, pp. 105–108.