# Dr. Andrey Minkevich

Kösliner Str. 11, 76139 Karlsruhe, Germany
+49 1525 3822535 / aa.minkevich@gmail.com
Citizenship: German
Languages: English (fluent), German (fluent), Russian (native), French (basic)

## Professional Summary

Experienced Embedded Software Engineer with over 10 years in the development of embedded and real-time systems for leading industrial clients including Bosch, VW, John Deere, and BSH (Gaggenau). Strong expertise in C/C++, software architecture, A-SPICE/V-Model processes, and Agile project management. Combines deep technical knowledge with strong leadership, communication, and analytical skills, supported by a PhD in Theoretical Physics.

## Professional Experience

**ITK Engineering GmbH, Rülzheim, Germany** — Software Development Engineer / Expert Engineer

*Oct 2013 – Present*

**CARIAD/VW, Wolfsburg (2026)**

• Modeled-based embedded software development and testing (Matlab/Simulink, TPT).
• Project Management and outsource to the best cost countries.

**VW, Salzgitter (2025 – 2026)**

• Embedded software development in C for Infineon microcontrollers.
• Responsible for requirements, architecture, development, and testing within A-SPICE and V-Model frameworks.

**BSH / Gaggenau, Traunreut (2022 – 2025)**

• Product Owner and UI/UX Lead for premium oven product line.
• Coordinated a 12-member cross-functional team (development, testing, CI/CD).
• Supported software architecture and development (C/C++, Qt/QML, Linux).
• Facilitated Agile ceremonies and Scrum meetings.

**Bosch, Abstatt & Feuerbach (2018 – 2022)**

• Base system development for autonomous driving (Daimler project).
• Software architecture and implementation using C/C++ under embedded Linux and QNX.
• Defined modular software design improving reliability and maintainability.

**GM, USA (2017)**

• Software development and performance profiling on Renesas boards.
• QNX OS evaluation for advanced driver assistance systems (ADAS).

**John Deere, Mannheim (2014 – 2018)**

• Integration of embedded software for tractor control units.
• Standardized build and verification processes across development teams.
• Contributed to process efficiency and software quality improvements.

**John Deere, Kaiserslautern (2013 – 2014)**

• Refactoring and development of software for tractor touchscreen systems (Linux, C++, Qt).

## Earlier Career (Scientific Background)

**Karlsruhe Institute of Technology (KIT), Germany — Scientist (2007–2013)**

• Developed algorithms and software for coherent X-ray scattering data analysis.
• Conducted experiments at synchrotron facilities (ANKA, ESRF).
• Supervised international students and doctoral candidates.

**Université Paul Cezanne / CNRS, Marseille, France — Postdoctoral Researcher (2005–2007)**

• Numerical and experimental X-ray diffraction studies in collaboration with ST Microelectronics.

**Belarusian State University, Minsk, Belarus — Research Fellow / PhD Student (2000–2005)**

• Developed “LEPTOS” software for X-ray spectra simulation in cooperation with Bruker AXS, Karlsruhe.

## Education

**Ph.D. in Theoretical Physics** — Belarusian State University, Minsk, 2004

**M.Sc. in Applied Mathematics** — Belarusian State University, Minsk, 2000

**Diploma in Applied Mathematics** — Belarusian State University, Minsk, 1999

## Technical Skills

Programming: C/C++, Python (NumPy, PyQt, SciPy, etc.)
Embedded Systems: Embedded Linux, QNX, Infineon µC
Software Architecture: UML (Enterprise Architect, PlantUML, Polarion)
Tools: Jira, Confluence, Git, SVN, Mercurial, Google Test, Unity, Eclipse, Visual Studio
Processes: A-SPICE, V-Model, Scrum, Agile
Other: MATLAB/Simulink, Mathematica, MathCAD, MS Office (+VBA), LaTeX

## Key Strengths

• Broad expertise across software architecture, embedded systems, and process compliance.
• Proven leadership and team coordination in cross-functional international environments.
• Strong analytical and problem-solving skills backed by scientific research experience.
• High motivation for continuous improvement, quality, and innovation.

References available upon request.