

# Dmitry Moskalchuk

Software Developer and Architect

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Netanya, Israel

## WORK EXPERIENCE

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CyberArk Software Ltd.

*Staff Software Engineer*

Nov 2022 – Present

Full-time

- Architected and developed core components of the [CyberArk EPM Agent for Linux](#), ensuring reliable privilege enforcement across diverse Linux distributions.
- Designed and developed a hybrid kernel/user-space mechanism for non-intrusive privilege-policy enforcement; technology later granted [US Patent 12,462,035](#) (Nov 4, 2025).
- Enhanced performance, stability, and cross-distro compatibility for enterprise-scale deployments.

Neocortex, Inc.

*Principal Software Architect*

May 2015 – Aug 2022

Full-time

- Designed and developed a containerization technology on top of the Linux kernel, enabling full GNU/Linux systems to run on non-rooted stock Android devices. Integrated this seamlessly into Android applications with no device preparation, rooting, or elevated privileges required.
- Built and maintained an Android application incorporating the containerization system, allowing execution of standard Linux workloads (computational tasks, load testing, etc.) directly on consumer phones.
- Designed, implemented, and operated the server-side infrastructure of a large-scale cloud platform managing up to 100,000 mobile devices. Delivered availability tracking, automated device replacement, task distribution, status monitoring, and full administration/maintenance tooling.
- Participated in a multi-company collaboration to bring [Folding@home](#) to the Arm (AArch64) platform. Migrated the Folding@home core to GROMACS 2020, added full Linux-on-Arm support, and later ported it to Apple M1 (macOS).

CrystaX, Inc.

*Founder and CEO*

Mar 2011 – Jun 2016

Full-time

- Created and led the development of the open-source [CrystaX NDK](#), evolving it into an advanced toolkit for native Android development in C/C++. Extended its capabilities to support Boost C++, Python, OpenSSH, Vim, and many other GNU/Linux tools-without modifying upstream sources.
- Provided consulting and software development services across a wide range of commercial projects. Work included mobile applications (Android/iOS), development of an Android-based tablet, and implementation of a real-time video chat system.
- Served both as a hands-on developer and as a manager, delivering solutions for clients across different industries.

*These represent the most significant projects I've worked on. For a full list of past roles and projects, please visit my portfolio: <https://crystax.me/>.*

## EDUCATION

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ITMO University

St. Petersburg, Russia

*Computer Software Engineering*

1995 – 2001

## SKILLS

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Languages: C (C99/11), C++ (C++ 98/11/14/17), Go, Java (SE), Ruby (MRI), JavaScript (ES6)  
Compilers: GCC, LLVM/Clang, OpenJDK, WebPack/Babel  
Frameworks: Boost C++ libraries, Ruby on Rails, React  
Tools: GNU coreutils, GNU make, Bash, Git, Vim, Curl, Docker, QEMU (KVM), Vagrant  
Databases: PostgreSQL, MySQL, SQLite, Redis  
Operating Systems: GNU/Linux, Android, iOS