

# Dmitry Moskalchuk

Software Developer and Architect

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Netanya, Israel

## WORK EXPERIENCE

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### Neocortix, Inc.

May 2015 – Aug 2022

### *Principal Software Architect*

Full-time

- Developed a new containerization technology on top of the Linux kernel, which allows running full-fledged GNU/Linux systems on non-rooted stock Android phones. It can be integrated into a regular Android application and doesn't require device preparation or raising privileges to run GNU/Linux systems, such as Debian.
- Built and maintained an Android application, which integrated the above-mentioned containerization technology and allowed the company to run typical Linux tasks (computational and load-testing) on Android devices.
- Built and maintained a server-side of the cloud system, efficiently handling up to 100.000 mobile devices, managing their availability, status of work, replacing unavailable ones, etc. Implemented all the administration and maintenance functionality required for such a project.
- Participated in a multi-company collaboration of moving a widely known project of biological protein folding computations Folding@home to Arm platform (AArch64). Built a new F@H core on top of GROMACS 2020 open-source project and then ported it to AArch64 - Linux and Mac (Apple M1).

### CrystaX, Inc.

Mar 2011 – Jun 2016

### *Founder and CEO*

Full-time

- Led the development of an open-source project CrystaX NDK, making it an advanced toolkit for native development for Android (C/C++). Brought it to the mature state, being able to easily port on Android Boost C++ libraries, Python, OpenSSH, Vim, and many other open-source languages and tools.
- As a software developer and a manager provided consulting and software development services to numerous businesses. Participated in many commercial projects as a contractor, from mobile game development (Android and iOS) to the development of Android itself (new Android-based tablet).

### Rhomobile, Inc.

Jun 2009 – Mar 2011

### *Senior Software Developer*

Full-time

- Participated in the development of an open-source product Rhodes - a framework, allowing Ruby developers create universal mobile applications for Android, iOS, Blackberry, and Windows Mobile platforms.
- Built and maintained a joint C++ engine for Android and iOS backends of Rhodes and got rid of two similar (but not identical) implementations written in Java and Objective-C, respectively. This way, I significantly lowered the amount of work needed for further development and support of those backends.

To see the full list of my jobs and positions, please visit my portfolio website <https://crystax.me/>.

## EDUCATION

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### ITMO University

Computer Software Engineering

1995 – 2001

St. Petersburg, Russia

## SKILLS

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