# Serge Ziryukin

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⌨ *github.com/ftrvxmtrx*

## Education

2003–2008 **B.S.**, *Belarusian State University of Informatics and Radioelectronics*, Minsk, *Computers, Systems and Networks*.

## BS thesis

title *Microkernel operating system based on L4 specification.*

supervisors Glecevich I.I.

description Two main types of kernels (monolithic and $\mu$) are described and compared, showing $\mu$-kernel drawbacks and benefits. L4-based $\mu$-kernel implementation for x86 and MIPS is provided, its loading/execution process and APIs are described.

## Most used tools for development

Languages C, OCaml, Shell, C++, ObjC, Lua

Op. systems Arch Linux, FreeBSD, Mac OS X

Documentation Doxygen, ocamldoc, LaTeX

Build systems CMake, GNU Make, qmake

SCM Git, Mercurial, SVN

IDE Emacs, XCode

WM xmonad

## Languages

English **Intermediate+**

## Experience

### Vocational

2010– **Software Engineer**, *Synesis*, Minsk.
Middleware for NEC devboard.

- In-kernel RTP/RTCP media support.

| 2010 | **Software Engineer**, *Synesis*, Minsk. |
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Porting DVB-T software to NEC devboard.

- Porting U-Boot to the devboard;
- Porting Linux to the devboard;
- Porting DVB-T software and platform-specific bugfixing;
- Minimizing and putting the whole firmware into 8Mb flash device;
- CMake build system.

2008–2010   **Software Engineer**, *Synesis*, Minsk.

iPhone game development.

- Porting existing games to the iPhone platform.

2008   **Software Engineer**, *Synesis*, Minsk.

OpenGLES-based UI tech demo for Freescale i.MX31 PDK.

- The tech demo.

2008   **Software Engineer**, *Synesis*, Minsk.

Porting previous project to Fujitsu board.

- Cross-compiler toolchain;
- Providing a way to run and test the software;
- Adding Fujitsu board support to middleware.

2008   **Software Engineer**, *Synesis*, Minsk.

DVB-T set-top box cross-platform software for three different boards.

- Cross-platform middleware API design and implementation;
- TI-DM64446 specific middleware implementation;
- Build system.

2007–2008   **Software Engineer**, *Synesis*, Minsk.

DVB-S set-top box (ST7109) software.

- Tests in Python;
- Extending automatic testing framework;
- Bug fixing;
- Screens;
- Automatic software update functionality and tools.

## Miscellaneous

2010–   **Sole developer**.

QuakeC bytecode to native code library compiler.
`https://github.com/ftrvxmtrx/qc2lib`

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| 2010– | **Sole developer**.<br>Single cross-platform Quake I/II/III game engine.<br>`https://github.com/ftrvxmtrx/metaquake` |
| 2010 | **Sole developer**.<br>Tool for finding unnecessary include directives.<br>`https://github.com/ftrvxmtrx/inclean` |
| 2010 | **Sole developer**.<br>2D puzzle for Maemo-based Nokia N900.<br>`http://maemo.org/downloads/product/Maemo5/colorflood` |
| 2009 | **Sole developer**.<br>Flac/Ape/Wavepack + cue sheet into tracks splitter.<br>`http://split2flac.googlecode.com` |
| 2009 | **Sole developer**.<br>Open-source 2D game engine.<br>`https://github.com/ftrvxmtrx/erszebet` |

- Lua for game code;
- Chipmunk for physics;
- Linux, FreeBSD, Mac OS X and iPhone support.

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| 2005–2006 | **Sole developer**.<br>Client-side QuakeC implementation for Darkplaces game engine. |
| 2005–2006 | **Sole developer**.<br>TomazQuake derived game engine with a lot of additional features. |
| 2004–2005 | **Sole developer, mapper, modeller**.<br>Quake UT-like game mod. |

## Interests

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| Programming | `http://github.com/ftrvxmtrx`<br>`http://ohloh.net/accounts/ftrvxmtrx` |
| Problems | `http://projecteuler.net/profile/ftrvxmtrx.png`<br>`http://spoj.pl/users/ftrvxmtrx` |
| Photography | `http://picasaweb.google.com/ftrvxmtrx` |
| Music | `http://last.fm/user/i515i` |
| Games | Quake I/II/III, UT99, Scrabble, Warcraft II, etc |