

# Serge Ziryukin

+37529-1822764

✉ [ftvxmtrx@gmail.com](mailto:ftvxmtrx@gmail.com)

📁 [github.com/ftvxmtrx](https://github.com/ftvxmtrx)



## 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 Gleceвич 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.  
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.  
OpenGL-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>

- 2010– **Sole developer.**  
Single cross-platform Quake I/II/III game engine.  
<https://github.com/ftrvxmtrx/metaquake>
- 2010 **Sole developer.**  
Tool for finding unnecessary include directives.  
<https://github.com/ftrvxmtrx/inclean>
- 2010 **Sole developer.**  
2D puzzle for Maemo-based Nokia N900.  
<http://maemo.org/downloads/product/Maemo5/colorflood>
- 2009 **Sole developer.**  
Flac/Ape/Wavepack + cue sheet into tracks splitter.  
<http://split2flac.googlecode.com>
- 2009 **Sole developer.**  
Open-source 2D game engine.  
<https://github.com/ftrvxmtrx/erszebet>
- Lua for game code;
  - Chipmunk for physics;
  - Linux, FreeBSD, Mac OS X and iPhone support.
- 2005–2006 **Sole developer.**  
Client-side QuakeC implementation for Darkplaces game engine.
- 2005–2006 **Sole developer.**  
TomazQuake derived game engine with a lot of additional features.
- 2004–2005 **Sole developer, mapper, modeller.**  
Quake UT-like game mod.

---

## Interests

- Programming <http://github.com/ftrvxmtrx>  
<http://ohloh.net/accounts/ftrvxmtrx>
- Problems <http://projecteuler.net/profile/ftrvxmtrx.png>  
<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