ANATOLY YAKOVENKO

aeyakovenko@gmail.com | GitHub | LinkedIn | resume

SKILLS

Hardware and Systems

- Embedded Operating Systems, RTOS, Linux Kernel, RPC, IPC, Android, Qualcomm MSMs, ARM, Hexagon DSP

Languages and Tools

- C, C++, Haskell, Make, Lua, Bash, Python, Ruby, Java, Perforce, Git, GDB, JTAG, Trace32

Patents

- US20150301955 Extending protection domains to coprocessors.
- US8869176 Exposing host operating system services to an auxillary processor.
- US9092281 Fast remote procedure call.

WORK EXPERIENCE

Qualcomm, San Diego CA

Senior Staff Engineer Manager, 2015 to Present
Senior Staff Engineer, 2012 to 2015
Staff Engineer, 2009 - 2012
Senior Engineer, 2006 - 2009
Engineer, 2003 - 2006

Advanced Technologies Group

- Lead Architect on a team of 10 for high performance DSP off-loading software stack on Qualcomm chipsets for next-generation applications.
- Commercial applications include Augmented Reality, Virtual Reality, 3D Camera processing, 4K video post-processing, and GoogleX's Project Tango.
- Technology used by 3rd party developers from major OEMS, such as Samsung, LG, Google, Xiaomi, OnePlus.

BREW

- Core kernel developer for BREW's Operating System.
- Built critical features such as application sand-boxing, kernel containers, device driver framework, IPC stack, system call tracing tools, IDL compilers.
- APIs and tools used by thousands of 3rd party developers, code shipped on hundreds of different handsets and in millions of units.

QChat

- Software developer for server components of a Push2Talk service.
- Implemented network protocols such as SIP/RTP/HTTP, and high performance logging and tracing tools for a large distributed system with over 40 components.

Alescere LLC, Lisle IL

Co-Founder, 2001 to 2003

- Founding member of [Alescere](), a VoIP startup
- Lead development of SIP and [RTP]() protocol stacks and server components for a VoIP system for small businesses.

University of Illinois at Urbana-Champaign

Research Assistant, 2003

- Developed a web server that supports QoS for HTTP requests
- Designed a probabilistic scheduler for the Linux kernel
- Implemented a roaming protocol for 802.11a/b networks for NetBSD

Personal Interests

- [Machine Learning]() and functional programming.
- Underwater hockey - 2012 USA Elite Team!

EDUCATION

Bachelor of Science in Computer Science

University of Illinois at Urbana-Champaign, 2003