

# ANATOLY YAKOVENKO

---

[ae yakovenko@gmail.com](mailto:ae yakovenko@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 auxiliary 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.
- Commercialized on multiple chipset families, [Linux](#), Windows and QNX.
- 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