# **ANATOLY YAKOVENKO**

aeyakovenko@gmail.com | GitHub | LinkedIn

# **SUMMARY**

Software developer with over 10 years of experience in embedded operating systems, developing <u>patents</u>, leading projects and contributing to large groups including <u>Linux Kernel</u>, with a focus on performance and optimization for Qualcomm ARM and DSP processors.

# **SKILLS**

# Hardware and Systems

• Embedded Operating Systems, Linux Kernel, Android, Qualcomm MSMs, System MMUs, ARM, Hexagon DSP

# Languages and Tools

• C, C++, Haskell, Lua, Make, Python, Ruby, Git, Perforce, GDB, Trace32

#### **WORK EXPERIENCE**

Qualcomm, San Diego CA

Senior Staff Engineer, 2012 to Present Staff Engineer, 2008 - 2012 Senior Engineer, 2006 - 2009 Engineer, 2003 - 2006

- Heterogenous Multicore Compute \*
  Lead development of a brand new technology featured in <u>Hexagon SDK</u> for of-loading computations between ARM and DSP co-processors on Qualcomm mobile chipsets.

  Developed several <u>patents</u>, and ported to <u>Linux Kernel</u>, Windows and Qnx. Enabled 15x reduction in power consumption in select Compute Vision algorithms.
- Mobile Operating Systems \*
   Lead development of Inter-Process Comunication for BREW, Qualcomms mobile
   operating systems. Developed secure frameworks for 3rd applications and developer
   tools for analizing performance and use.
- QChat Push To Talk \*
   Developed network components using SIP/HTTP/RTP and proprietary standards for QChat push to talk service. Designed high performance logging tools to handle tens of thousands of transactions per second from many networked components with a real time monitoring system.

#### Alescere LLC, Lisle IL

#### Co-Founder, 2001 to 2003

- Founding member of Alescere, a VOIP startup
- SIP and <u>RTP</u> protocol stacks, and server components for a VoIP system for small businesses

# University of Illinois at Urbana-Champaign

Research Assistant, 2003

- Web server that supports QoS for HTTP requests
- Probabilistic scheduler for the Linux kernel
- Roaming protocol for 802.11a/b networks for NetBSD

# Personal Research

• Neural Networks, Genetic Algorithms, Markov Models, and Bayesian Inference Algorithms

# **EDUCATION**

Bachelor of Science in Computer Science University of Illinois at Urbana-Champaign, 2003