ANATOLY YAKOVENKO

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SUMMARY

Software developer with over 10 years of experience in embedded operating systems, developing patents, leading projects and contributing to large groups including Linux Kernel, 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 Hexagon SDK for off-loading computations between ARM and DSP co-processors on Qualcomm's mobile chips. Developed several patents, and ported to Linux Kernel, Windows and Qnx. Enabled 15x reduction in power consumption in select Compute Vision algorithms.
- Mobile Operating Systems
  Lead development of Inter-Process Communication for BREW, Qualcomm's mobile operating systems. Developed secure frameworks for 3rd party applications and developer tools for analyzing performance and use. Developed a custom compiler for Interface Description Language achieving a 2x reduction in minimum memory requirements for the entire operating system.
- 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
- 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 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