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, Bash, 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 developer of a brand new technology featured in Hexagon SDK for off-loading computations between ARM and DSP co-processors on Qualcomm's mobile chips. Achieved a 10x reduction in co-processor communication latency. Developed several patents, and commercialized on Android, Windows and Qnx. Enabled cutting edge Computer Vision, Augmented Reality, 3d camera technologies utilizing Qualcomm's DSP on numerous devices.

- Mobile Operating Systems
  Lead developer of Inter-Process Communication for BREW, Qualcomm's mobile operating systems - acapability based object oriented embedded operating system, shipped on thousands of devices, millions of units, with billion of 3rd party application downloads. Developed developer frameworks, tools, and custom Interface Description Language compiler. Lead interface reviews with a focus on binary backwards compatibility, security, and performance.

- 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

References

- Brian Kelley bkelley@quicinc.com, Senior Director of Technology
- Rob Walker rwalker@quicinc.com, Senior Director of Engineering
- Ramesh Chandrasekhar rameshc@qti.qualcomm.com, Director of Engineering

EDUCATION

Bachelor of Science in Computer Science

University of Illinois at Urbana-Champaign, 2003