# ANATOLY YAKOVENKO

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## SUMMARY

Software developer with over 10 years of experience in embedded operating systems, shipping software on millions of units, 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, RTOS, Linux Kernel, Android, Qualcomm MSMs, System MMUs, ARM, Hexagon DSP

### Languages and Tools

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

## WORK EXPERIENCE

### Qualcomm, San Diego CA

Senior Staff Engineer Manager, 2015 to Present
Senior Staff Engineer, 2012 to 2015
Staff Engineer, 2008 - 2012
Senior Engineer, 2006 - 2009
Engineer, 2003 - 2006

OpenDSP

- Lead Architect of a brand new technology for utilizing DSP subsystems on Qualcomm chipsets for next-generation high-performance applications.
- Commercial applications include Augmented Reality, Virtual Reality, 3D Camera processing, 4K video post-processing, and GoogleX's Project Tango.
- Technology used by all major OEMS, such as Samsung, LG, Google, Xiaomi, OnePlus.

BREW

- Core kernel developer for BREW's Operating System.
- Built critical features such as application sandboxing, device driver framework, interprocess communication, system call tracing tools, IDL compiler for network transparent objects.
- Shipped to thousands of different handsets and in millions of units.

QChat

- Software developer for server components of a Push2Talk service.
- Implemented various 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 Research*

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

# References

- Brian Kelley, Senior Director of Technology, [bkelley@quicinc.com](mailto:bkelley@quicinc.com)
- Rob Walker, Senior Director of Engineering, [rwalker@quicinc.com](mailto:rwalker@quicinc.com)
- Ramesh Chandrasekhar, Senior Director of Engineering, [rameshc@qti.qualcomm.com](mailto:rameshc@qti.qualcomm.com)

# EDUCATION

## *Bachelor of Science in Computer Science*

University of Illinois at Urbana-Champaign, 2003