



# Nathan Rickey

## Senior Software Engineer

✉ natesd@gmail.com  
🌐 View Online  
📄 Get PDF  
🌐 LinkedIn  
🐙 GitHub  
☎ 619-993-9415

### Background

Starting in my early teens I began writing PC applications in my free time -- from simple task automation to developing a badge barcode scanning framework for a bookstore. While in college I worked as a QA Analyst supporting the launch of EverQuest II, and a week after I graduated from University I began my first full time job commercializing PlayStation 3 games. After investing several years in professional game development, I decided to pursue software development in the telecom industry. Since joining Qualcomm I have worked on many projects, with most of my time spent developing a modem-based voice and video over IP (VoIP/VoLTE/ViLTE) solution now used by Android phones across the globe.

### Experience

#### Senior Engineer at Qualcomm Technologies, Inc.

5 yrs, 10 mos (May 2010 - Present)

- Launched Modem-based Voice and Video Over IP based on 3gpp Standards (IR92, IR94)
- Launching IMS with wireless operators across the world (VzW, ATT, TMobile, DoCoMo)
- Facilitating countless device manufacturers to integrate IMS (Sony, HTC, Motorola, Sharp)
- Developed an unreleased Mobile App Store for BREW OS
- Maintaining QChat push-to-talk modem client
- SIP call flows and protocol headers (registration, call setup, call modify)
- SDP based media negotiation using voice+video+text, preconditions, SDPCapNeg

#### C++ Game Programmer at Kalloc Studios, Inc.

2 yrs, 10 mos (Aug 2007 - May 2010)

- Launched internationally-published PS3 titles: [The Saboteur] [Destroy All Humans! 3] [Puzzle Quest: Galactrix] [Puzzle Chronicles]
- Write and maintain PS3 code based on original Xbox360 source
- Develop tools to manipulate meta data used by internal and external content pipelines
- Implement PS3-specific features using Sony's PS3 APIs including: file I/O; game data; save game systems; audio systems; online gameplay; game statistics; leaderboards
- Develop cross-platform multiplayer network connection and handling
- Maintain and enhance multiple third-party libraries within all company games

#### Engineering QA Analyst at Sony Online Entertainment

1 yr, 2 mos (Aug 2004 - Sep 2005)

- Launched MMO RPG [EverQuest II]
- Create and conduct test cases for engineer team's code changes
- Plan with engineers to develop useful test cases and report regression
- Meet with Test Server players for zero-day issues
- Review and submit bugs verified by outsourced QA team
- Verify Engineering release notes

Additional

Recent Endorsements

@Qualcomm

10/2015 | Thanks for your extraordinary contribution to CMCC VoLTE launch with Hisense M821 device! • Staff Engineer

06/2015 | In appreciation for your huge contributions on 6 major MSM8994 phones launches for Japan 3 operators at the same time. This could not be achieved without your excellent and tireless support. It is also the great achievement for Qualcomm IMS solution • Director of Engineering

06/2014 | In appreciation for your huge contributions on the timely and excellent support to SOMC and Sharp VoLTE phones for Docomo, 1st major VoLTE/VT operator in the world, which achieved Qualcomm great IMS milestone. • Director of Engineering

04/2014 | Thanks and appreciation for your hard work, dedication, commitment and sacrifices you made in last 2 months for Motorola LE support for Verizon. Thanks once again for your outstanding support. • Principal Engineer/Manager

08/2013 | VzW VoLTE and VT ePDG Waltham IOT Efforts • Director of Engineering

08/2013 | For innovative thinking about Unit Tesing Framework for QIPCALL module and your dedication and hardwork to implementing it . • Senior Staff Engineer/Manager

10/2010 | Nathan you did an excellent job to track down the SURF BMP builds for the ETM analysis for ATT performance activity. You tirelessly dogged down every issue with the build to get it working. Good Job! • Senior Director of Engineering

08/2010 | Thank you for all your hard work and dedication to make the Verizon Storefront Application Upgrader a reality. Well Done! • Senior Program Manager

Side Projects

I own several Raspberry Pis and enjoy tinkering with web technologies in my free time. I'm very interested in almost all aspects and languages of software development. I've built all my own desktops from parts since around age 12. I love thinking about and talking about all aspects of modern computing -- from wearables to deep learning.

Skills

C++	nginx	Boost	SVN	H265
Go	Real Time OS	Loki	Git	Runtime Tradeoffs
Golang	Unreal Engine	Luabind	Mobile	Problem Solving
Java	Torque Engine	STD	SIP	Software Arch
Visual Basic	Ogre3D	STL	SDP	Cont. Integration
C#	N3D	Google Test	Media Negotiation	Test Driven Dev
Python	TinyXML	Google Mock	AMR	Automation
Perl	FMOD	PS3	AMR-WB	Refactoring
Javascript	Wwise	Xbox 360	H263	Optimization
PHP	Bink	Perforce	H264	Frameworks