

Robert Taglang

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EDUCATION	Drexel University , Philadelphia, PA • GPA: 3.45 Master of Science in Computer Engineering • Thesis: Real-time Video Alignment and Fusion Using Feature Detection on FPGA Bachelor of Science in Computer Engineering	Sep 2012 – Jun 2017									
OPEN SOURCE	COLLADA2GLTF ★ 167 🍏 68 Lead Maintainer/Contractor • The official Khronos Group tool for converting COLLADA 3D assets to the glTF format • Built from the ground up with modern and scalable C++ design principles • Fully automated cross-platform builds, testing, and releases powered by Travis CI and Appveyor	Sep 2017 – Present									
AFFILIATIONS	Khronos Group , Individual Contributor Member	Jul 2018 – Present									
INTERESTS	<table><tr><td>Modern C++</td><td>Modular build systems</td><td>JavaScript</td></tr><tr><td>glTF - the efficient format for 3D assets</td><td colspan="2">Clean and scalable Node.js backends</td></tr><tr><td>FPGA computing</td><td>GPU acceleration</td><td>Responsive UX with Vue.js</td></tr></table>		Modern C++	Modular build systems	JavaScript	glTF - the efficient format for 3D assets	Clean and scalable Node.js backends		FPGA computing	GPU acceleration	Responsive UX with Vue.js
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glTF - the efficient format for 3D assets	Clean and scalable Node.js backends										
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PROFESSIONAL EXPERIENCE	Private Machines Inc. , Brooklyn, NY Software Engineer • Lead a small team on grant funded work for automated reduction of vendor UEFI firmware binaries, capable of reducing a firmware payload by up to 70% • Head development of embedded UEFI applications providing secure, remotely verifiable cloud deployments • Ensure a smooth hardware experience with driver contributions to the upstream Linux kernel and iPXE bootloader	Jun 2017 – Present									
	Analytical Graphics Inc. , Exton, PA Software Developer Co-op (3D/Web) • Principally develop data structure optimization stages for a JavaScript glTF asset processing pipeline • Make contributions to the open-source Cesium WebGL virtual globe engine for visualizing geospatial data • Draft specifications for the 3D Tiles open standard for streaming massive 3D datasets, currently undergoing the Open Geospatial Consortium (OGC) Community Standard process	Mar 2016 – Jun 2017									
	Susquehanna International Group , Bala Cynwyd, PA Software Engineering Co-op • Develop and maintain C# and .NET applications that handle high-volume data where low latency is critical • Engineer an ASP.NET REST backend to improve the accessibility of retrieving historical pricing data • Build a full-stack code review system using Silverlight for sharing, reviewing, and approving local Perforce changes before they hit production	Sep 2014 – Mar 2015									
	Bentley Systems , Exton/Philadelphia, PA Software Development Co-op • Simulate real-time 3D object collisions in-engine for infrastructure CAD modeling • Implement cross-platform API for mobile device sensors across iOS, Android, and Windows Phone • Integrate physics and sensor data to create an interactive AR/VR model viewing experience	Sep 2013 – Mar 2014									
	Drexel University Applied Informatics Group , Philadelphia, PA Research Engineer • Work with the research team to build decentralized applications for mesh networks • XOP - Robust mesh network overlay for the XMPP chat protocol • SISTO - Distributed torrent and metadata system • Spearhead deployment to Java for Android integration and use in embedded environments • Assist in preparation of academic papers for conferences	Dec 2012 – Aug 2013 Apr 2014 – Sep 2014									