

EDUCATION	University of California - Berkeley Ph.D. in Electrical Engineering and Computer Sciences May 2015 M.S. in Electrical Engineering and Computer Sciences May 2013 GPA: 4.00/4.00 <i>3D and 2D surface reconstruction algorithms for architectural modeling</i>
	Carnegie Mellon University B.S. in Electrical and Computer Engineering May 2011 QPA: 3.91/4.00 - Dean's List <i>Minors in Physics, Computer Science</i>
WORK EXPERIENCE	Google 03/2016 - Present Staff Software Engineer - AR Team - Tech lead for ARCore Depth API. - Developed real-time passive depth sensing on mobile hardware. - Tech lead on real-time 3D reconstruction techniques with noisy depth on smartphones. - Tech lead on foveated rendering techniques for mobile VR headsets. - Developed custom hardware-foveation displays for VR. - <i>11 patents filed.</i>
	Indoor Reality, Inc. 06/2015 - 03/2016 Chief Technology Officer (CTO) - Principal Investigator (PI) on multiple federal grants totalling \$2 Million. - Tech lead in developing hardware, software, and algorithms used for automatic and rapid indoor building 3D modeling via backpack-mounted scanning system. - Developed software for data collection, algorithmic processing, and visualization. - Supervisor for visualization and deployment development team. - <i>3 patents filed.</i>
	@Maps 08/2014 - 12/2014 Principal Engineer - Developed hardware systems and surface reconstruction software for building modeling. Research and development of camera calibration procedures.
	Speir Technologies 01/2013 - 01/2014 Software Development Consultant - Developed demo application and 3D modeling algorithms for remote viewing medical ultrasound scanning.
	MIT Lincoln Laboratory 05/2011 - 08/2011 Summer Intern - Group 104: Intelligence and Decision Theory - Developed algorithms for creation of synthetic data for Synthetic Aperture Radar (SAR) CCD track-finding.
TECHNICAL SKILLS	Programming Languages: C/C++, Java, Python, Matlab, BASH, x86 Markup Languages: HTML, LaTeX, Markdown Software: Unity, Autodesk Revit, Recap, Navisworks, AutoCAD, SolidWorks, Visual Studio, Git, SVN Frameworks: Eigen, Boost, OpenCV, PCL, OpenGL, GLSL, Halide, Qt, Android, Google Tango, Doxygen
AWARDS	Awarded Best Student Paper - GRAPP 2014 01/2014 Awarded NSDEF Fellowship 09/2013 - 05/2016