Eric Lee Turner, PhD

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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
3D and 2D surface reconstruction algorithms for architectural modeling

Carnegie Mellon University
B.S. in Electrical and Computer Engineering — May 2011
QPA: 3.91/4.00 - Dean's List
Minors in Physics, Computer Science

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.
- *7 patents filed.*

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.
- *3 patents filed.*

@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