

Scarlett (Sijia) Teng

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• EDUCATION

- ◇ **UC Berkeley**, Berkeley, CA 8/2016 – 5/2017
 - Master of Engineering, Electrical Engineering & Computer Science, GPA 3.8
 - Related courses: machine learning, database, computer vision, computer graphics, interactive device design, data analytics, project management
- ◇ **Fudan University**, Shanghai, China 9/2012 – 6/2016
 - Bachelor of Science, Electronics Engineering, GPA 3.7
 - Related courses: computer architecture, computer networks, signals and systems, digital and analog circuit

• EXPERIENCE

- ◇ **Researcher, Berkeley Center for New Media & Berkeley Institute of Design**, Berkeley, CA 8/2016 – present
 - Develop a vision correcting display that enables people with eye aberrations to see clearly without glasses.
 - My work: Display two images of binocular vision in a single screen (Python, OpenCV, Photoshop).
- ◇ **Designer & Developer, Berkeley Institute of Design**, Berkeley, CA 10/2016 – 12/2016
 - Develop a projector that helps users to learn to play the guitar.
 - My work: Micro controller (Arduino, C++); Android app development (Java, xml); project management.
- ◇ **Researcher, Smart Health Lab**, Shanghai, China 11/2015 – 6/2016
 - Developed a pressure sensitive sleeping monitoring bed sheet system.
 - My work: starter of the project; built first prototype (FPGA, wifi module, sensor, Matlab).
- ◇ **Research Assistant, Key Lab for Information Science**, Shanghai, China 3/2014 – 6/2016
 - Developed a fast algorithm for Physical Optics integral calculation.
 - My work: develop with higher speed than brute force and equipped it with self-adaptive calculation (Matlab).
- ◇ **Programming leader, Computer Network Lab**, Shanghai, China 9/2015 – 1/2016
 - Developed a campus-based social website that enables people make appointment for meal, sport, study, etc.
 - My work: full stack (ThinkPHP, Javascript, HTML, CSS, SQL); documentation; project management.
- ◇ **Developer, Circuit and Systems Lab**, Shanghai, China 7/2015 – 8/2015
 - Developed a high performance DC-DC stabilized voltage power supply.
 - My work: circuit design (Analog, and digital), micro controller; electro soldering; documentation.

• TECHNICAL PROFICIENCY

- ◇ **Programming skills:** C, C++, Python, SQL; knowledge of: Java, git, Shell Script, HTML, PHP, JavaScript, Perl.
- ◇ **Software skills:** MATLAB, OpenCV, OpenGL, OrCAD, Protel, LabView, ANSYS, LaTeX, Adobe.
- ◇ **Hardware skills:** FPGA (VHDL, Verilog), micro controller, PCB, 3D printing, laser cutter, electro soldering.

• AWARDS & HONORS

- ◇ National Scholarship (~top 0.2% students) 11/2014
- ◇ Outstanding Student Achievement Award in Fudan University 10/2014

• SELECTED PUBLICATIONS

- ◇ Wu, Y.M., Teng, S.J., “Frequency-independent approach to calculate physical optics radiations with the quadratic concave phase variations”, *Journal of Computational Physics*.
- ◇ Teng, S.J., Wu, Y.M., “The Numerical Steepest Descent Path Method to Calculate Physical Optics Radiations with Concave Phase Variations”, *2016 IEEE ICCEM*.
- ◇ Wu, Y.M., Teng, S.J., “An Efficient Numerical Steepest Descent Path Method to Calculate the Physical Optics Scattered Fields With Concave Phase Variations”, *2016 IEEE AP-S/URSI*.