# PO-NAN LI

318 Campus Drive, Stanford, CA 94305, USA
www.ponan.li ⋄ liponan@stanford.edu

## EDUCATION

**Stanford University** *Sep. 2015 - Sep. 2020*
PhD Candidate in Electrical Engineering
Dissertation: *Computational approaches for multi-scale biological imaging and modeling*
Advisors: Soichi Wakatsuki and Piero Pianetta

**National Tsing Hua Univeristy** *2012*
Master of Science in Photonics
Thesis: *Selective excitations of localized surface plasmons in designed nanostructures*
Advisor: Chen-Bin Huang

**National Tsing Hua Univeristy** *2010*
Bachelor of Science in Electrical Engineering

## EXPERIENCE

**Hardware Engineering Intern**, Google, Mountain View, CA, USA *Jun. 2019 - Sep. 2019*
Built a camera calibration apparatus and developed an image transformation algorithm for Daydream, Google's VR team.

**Research Assistant**, Academia Sinica, Taipei, Taiwan *Sep. 2012 - Aug. 2015*
Developed novel computational approaches for biological imaging.
Advised by Dr. Ting-Kuo Lee.

## LEADERSHIP

**Regional Director**, North America Taiwan Study Association *May 2017*
**Vice President**, Stanford Taiwanese Student Association *Mar. 2016 - Feb. 2017*

## AWARDS AND SCHOLARSHIPS

**Best Poster Award**, The 6th International Workshop on FEL Science *Dec. 2013*
**Student Travel Grant**, National Tsing Hua University *Oct. 2011*
**Distinguished Graduate Fellowship**, National Tsing Hua University *Sep. 2010*

## PUBLICATION

- Jonathan Herrmann, **Po-Nan Li**, Fatemeh Jabbarpour, Anson C. K. Chan, Ivan Rajkovic, Tsutomu Matsui, Lucy Shapiro, John Smit, Thomas M. Weiss, Michael E. P. Murphy, and Soichi Wakatsuki, "A bacterial surface layer protein exploits multi-step crystallization for rapid self-assembly," *PNAS*, 201909798 (2019).
- **Po-Nan Li**, Jonathan Herrmann, Soichi Wakatsuki, and Henry van den Bedem, "Transport Properties of Nanoporous, Chemically Forced Biological Lattices," *J. Phys. Chem. B* **123**, 10331 (2019).
- D.A. Barmherzig, J. Sun, **P.-N. Li**, and E.J. Candès, "Holographic Phase Retrieval and Reference Design," *Inverse Problems* **35**, 094001 (2019).

- **Po-Nan Li**, Jonathan Herrmann, Bradley B. Tolar, Frédéric Poitevin, Rasika Ramdasi, John R. Bargar, David A. Stahl, Grant J. Jensen, Christopher A. Francis, Soichi Wakatsuki, and Henry van den Bedem, "Nutrient transport suggests an evolutionary basis for charged archaeal surface layer proteins," *ISME J.* **12**, 2389 (2018).
- J. Herrmann, F. Jabbarpour, P.G. Bargar, J.F. Nomellini, **P.-N. Li**, T.J. Lane, T.M. Weiss, J. Smit, L. Shapiro, and S. Wakatsuki, "Environmental Calcium Controls Alternate Physical States of the Caulobacter Surface Layer," *Biophys. J.* **112**, 1 (2017).
- **Po-Nan Li**, Zong-Han Wu, Chien-Nan Hsiao, Ting-Kuo Lee, and Chien-Chun Chen, "Determination of three-dimensional atomic positions from tomographic reconstruction using ensemble empirical mode decomposition," *New J. Phys.* **18**, 083025 (2016).
- Ti-Yen Lan, **Po-Nan Li**, and Ting-Kuo Lee, "Method to enhance the resolution of x-ray coherent diffraction imaging for non-crystalline bio-samples," *New J. Phys.* **16**, 033016 (2014).
- **Po-Nan Li**, Hsiu-Hao Tsao, Jer-Sing Huang, and Chen-Bin Huang, "Subwavelength localization of near fields in coupled metallic spheres for single-emitter polarization analysis," *Opt. Lett.* **36**, 2339 (2011).