Luzhe Huang

E-mail lzhuang0324@ucla.edu **Website** porphura.github.io
Tel. (1) 424 402 2604

EDUCATION

Sep. 2019 - Now **MS/PhD** ECE Department, University of California, Los Angeles
Instructor: Aydogan Ozcan, GPA: 3.97/4.00

Sep. 2015 - Jun. 2019 **Bachelor of Engineering (BEng)** CKC Honors College, Zhejiang University, China
Major: Opto-Electronics Information Science and Engineering, Minor: Statistics, GPA: 3.96/4.00.

AWARDS

Jun. 2019 **Zhejiang University Top 10 Student Research Nomination**
Nov. 2018 **Chu Kochen College Innovation Scholarship**
Oct. 2018 **Zhejiang University Special Scholarship (Supreme award for Undergraduates)**
Lixin Tang Scholarship
Nov. 2017 **Chu Kochen College Innovation Scholarship**
Oct. 2017 **National Scholarship**
The First Prize Scholarship
Sep. 2017 **MATLAB Innovation Prize (Special Prize) in China Undergraduate Mathematical Contest in Modeling**
Dec. 2016 **The First Prize of Physics Innovation Contest in Zhejiang Province**
Oct. 2016 **National Scholarship**
The First Prize Scholarship
The First Prize of National Mathematic Contest

PUBLICATIONS

JOURNALS

1. X. Yang, **L. Huang**[1], Y. Luo, et al. Deep-learning-based virtual refocusing of images using an engineered point-spread function. *ACS Photonics* 2021, 8, 7, 2174-2182
2. **L. Huang**, T. Liu, et al. Holographic image reconstruction with phase recovery and autofocusing using recurrent neural networks. *ACS Photonics* 2021, 8, 6, 1763-1774
3. **Huang, L.**, Chen, H., Luo, Y. et al. Recurrent neural network-based volumetric fluorescence microscopy. *Light Sci. Appl.* 10, 62 (2021). DOI:10.1038/s41377-021-00506-9
4. Y. Luo, **L. Huang**[2], Y. Rivenson, A. Ozcan, Single-shot autofocusing of microscopy images using deep learning. *ACS Photonics*, 2021, 8, 2, 625-638
5. **L. Huang**, Y. Fu, R. Chen, et al. SNR-adaptive OCT angiography enabled by statistical char-

[1] Co-first author
[2] Co-first author

acterization of intensity and decorrelation based on multi-variate time series model. *IEEE Trans. Med. Imaging*, vol. 38, no. 11, pp. 2695-2704, Nov. 2019, DOI: 10.1109/TMI.2019.2910871.

6. **L. Huang**, X. Wang, Y. Yuan, S. Gu, Y. Shen, An improved algorithm of NLOS imaging based on Bayesian statistics. *JOSA.A* 36(5), 834-838, 2019.
7. **L. Huang**, T. Fang, Q. Shuai, Calibration and imaging of a CT system, *Chinese Journal of Engineering Mathematics.* Vol. 34, Supp. 1, 2017.

CONFERENCES

1. **L. Huang**, Y. Luo, Y. Rivenson, and A. Ozcan, "Neural network-based single-shot autofocusing of microscopy images," in Conference on Lasers and Electro-Optics (CLEO), OSA Technical Digest (Optica Publishing Group, 2021), paper ATu4L.2.
2. **L. Huang**, Y. Luo, Y. Rivenson, and A. Ozcan, "Volumetric fluorescence microscopy using convolutional recurrent neural networks," in Conference on Lasers and Electro-Optics (CLEO), OSA Technical Digest (Optica Publishing Group, 2021), paper STh2D.3.
3. **L. Huang**, Y. Luo, Y. Rivenson, and A. Ozcan "Deep learning-based single-shot autofocusing of microscopy images", Proc. SPIE 11647, Imaging, Manipulation, and Analysis of Biomolecules, Cells, and Tissues XIX, 116470Y (5 March 2021); https://doi.org/10.1117/12.2580672
4. **L. Huang**, Y. Luo, Y. Rivenson, and A. Ozcan "Deep-learning-based volumetric imaging in fluorescence microscopy", Proc. SPIE 11649, Three-Dimensional and Multidimensional Microscopy: Image Acquisition and Processing XXVIII, 116490G (5 March 2021); https://doi.org/10.1117/12.2580674

EXPERIENCE

Feb. 2019 -Jun. 2019	**Software R&D Engineer**	Autowise.ai
Jul. 2018 -Aug. 2018	**Summer Research Intern**	Boston University
Jul. 2017 -Jul. 2017	**SENG Summer Camp**	Hong Kong University of Science and Technology