

## Hongli Ni

College of Optical Science and Engineering

Zhejiang University, 38 Zheda Road, West Lake District, Hangzhou, China

Email: [3150102200@zju.edu.cn](mailto:3150102200@zju.edu.cn)

### EDUCATION

#### Bachelor of Engineering

09/2015-06/2019

Opto-Electronics Information Science and Engineering, Zhejiang University

Hangzhou, China

4-year GPA:87.9/100, Rank: 12/113

### RESEARCH

#### Visiting Undergraduate Researcher

07/2018-09/2018

Electrical and Computer Engineering/ Photonics Center, Boston University

Boston, MA

Advisor: Professor Ji-Xin Cheng; Co-advisor: Thomas Bifano

Project: Volumetric Stimulated Raman Imaging with a High-speed Deformable Mirror

- Designed and built a volumetric SRS imaging microscopy
- Designed 3D scanning LabVIEW software
- Calculated and measured system characteristics
- Applied sparse sampling algorithm to improve imaging speed

#### Undergraduate Researcher

06/2018-07/2018

College of Optical Science and Engineering, Zhejiang University

Hangzhou, China

Advisor: Professor Peng Li

Project: Optical Coherence Tomography Angiography-based Capillary Velocimetry

- Did Eigen-decomposition analysis of complex OCT signals
- Distinguished particles in Brownian motion by auto-correlating complex OCT signals

#### Undergraduate Researcher

05/2017-04/2018

College of Optical Science and Engineering, Zhejiang University

Hangzhou, China

Advisor: Professor Kaiwei Wang

Project: Visual Aids Technology for the Blind based on Deep Learning

- Built a classification network with 77.7% accuracy in 80 classes based on MobileNet
- Transferred classification network to an android microphone
- Built customizable classification network with 65.87% accuracy in 10 classes based on MatchingNet
- Code is in the github repository <https://github.com/welkincici/MatchingNet>

### AWARDS

- 1<sup>st</sup> Prize, Optical Design Competition (3/131), East Division of China 2017-2018
- 2<sup>nd</sup> Prize, Scholarship for Outstanding Students (13/113), Zhejiang University 2017-2018
- 3<sup>rd</sup> Prize, Zhongkong Cup Robot Competition, Zhejiang University 2016-2017

### PUBLICATION

Peng Lin\*, **Hongli Ni\***, Huate Li, Fengyuan Deng, Haonan Lin, Nicholas A. Vickers, Thomas Bifano, Ji-Xin Cheng. "Volumetric stimulated Raman imaging with a high-speed deformable mirror" (Abstract has been submitted to SPIE)

### TECHNICAL STRENGTHS

**Programming and software:** C, Python, Matlab, Tensorflow, LabVIEW, ZEMAX, ASAP, Solidworks, Origin

**Skills:** Optical Alignment, SRS Microscopy

### SERVICE

Vice President, Student Union of College of Optical Science and Engineering

2017-2018