Xiaodong **Wang**

MASTER STUDENT IN SUSTECH

1088 Xueyuan Avenue, Nanshan District, Shenzhen, Guangdong Province, China

(+86) 13714345142 | 11930406@mail.sustech.edu.cn | https://xiaodongwo.github.io/ | xiaodongwo

"Make the change that you want to see in the world."

Education

SUSTECH(Southern University of Science and Technology) *Shenzhen, China*

M.S. IN BIOMEDICAL ENGINEERING *Sep. 2019 - present*

- **Master Thesis**: Fluorescence Imaging through Scattering Media by Wavefront Shaping and Speckle Deconvolution Method

CUSTECH(Changchun University of Science and Technology) *Changchun, China*

B.S. IN OPTO-ELECTRONICAL ENGINEERING *Sep. 2015 - Jul. 2019*

- **Bachelor Thesis**: Simulation Design of Asymmetric Integrated Waveguide M-Z Interferometer

Research Experience

Intelligent Optimization Algorithms for Wavefront Shaping *Shenzhen, China*

CORE MEMBER *Aug. 2020 - present*

- Constructed a feedback wavefront shaping optical system.
- Implemented five intelligent optimization algorithms for focusing through scattering medium.

Fluorescence-based Speckle Deconvolution Imaging *Shenzhen, China*

CORE MEMBER *Sep. 2020 - present*

- Built a reflective fluorescence system by virtue of labview, and the speckle deconvolution algorithm was used for rapid imaging through scattering medium.

Polymer-dots for STORM Imaging *Shenzhen, China*

MEMBER *Sep. 2019 - Sep. 2020*

- Developed a new kind of optically switchable fluorescent probe for Stochastic Optical Reconstruction Microscopy (STORM) Imaging.
- Implemented STORM algorithm using ThunderSTORM plugin in imageJ.

Teaching Experience

TA in Medical Image Processing Course *Shenzhen, China*

CORE MEMBER *Sep. 2020 - Nov. 2020*

- Gained expertise in Matlab image processing and teaching experience.

TA in Biomedical Optics Experiments Course *Shenzhen,China*

CORE MEMBER *Mar. 2020 - Jun. 2020*

- Gained expertise in optical instrumentation and teaching experience.

Skills

Programming Matlab, Python, Zemax, FDTD, imageJ, LaTeX

Languages Chinese, English, Cantonese

Publication

- Liu, Z., Liu, J., **Wang, X.**, Mi, F., Wang, D., Wu, C. (2020). Fluorescent bioconjugates for super-resolution optical nanoscopy. Bioconjugate Chemistry, 31(8), 1857-1872.