

CHENXU ZHOU

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EDUCATION

Zhejiang University (ZJU), Hangzhou, China

Sep. 2020 – Present

- **Major:** Opto-Electronics Information Science and Engineering
Anticipated Graduation Date: June, 2024
- **Minor:** Advanced Honor Class of Engineering Education@Chu Kochen Honors College(CKC)
- **GPA:** 3.90/4.0 (88.8/100)
- **Course Highlights:** Introduction to Computer Vision(4.5/5.0, CKC Turing Course), Machine Vision(4.5/5.0), Wheeled Robot(4.8/5.0), Computer optical system design(5.0/5.0), Opto-Mechanical Structure Design(5.0/5.0), Geometrical Optics(4.8/5.0), Probability Theory & Mathematical Statistics(5.0/5.0)

RESEARCH EXPERIENCE

Learning-based Reverse Design of Optical Devices ZJU, Hangzhou, China

2022 – Present

SRTP Member Supervised by Daoxin Dai, Professor@ZJU OSE

- Designed a new network architecture **TandemNet** to solve the inverse non-unique solution problem.
- Optimized network training with evolutionary algorithms.
- Expanded design approach for 2-channel optical WDMs.

SELECTED COURSE PROJECTS

Image-based 3D Reconstruction and 6D Pose Estimation

Nov. 2022 – Dec. 2022

- Reconstructed the 3D model of objects with COLMAP and NeuS.
- Estimated the pose of objects with HLoc and OnePose.
- Extracted foreground objects from images using Pixellib.

Indoor Navigation of a Wheeled Robot

Apr. 2022 – Jun. 2022

- Implemented the ICP algorithms based on laser data from wheeled robots.
- Estimated the 6D pose of wheeled robots with EKF.
- Used the A* algorithm for path planning and DWA for trajectory planning.

SKILLS

- **Platform:** macOS, Linux, Windows
- **Languages:** Familiar: Python, C/C++; Basic: MATLAB, Lua, Julia
- **Framework:** Familiar: PyTorch, NumPy, Matplotlib, OpenCV; Basic: Tensorflow, OpenGL
- **Tools:** ROS(Gazebo, Rviz), Shell, Git, Vim, CMake, L^AT_EX, Docker, COLMAP, Blender

SELECTED HONORS AND AWARDS

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| • Zhejiang University 2nd Class Scholarship | 2021 |
| • Provincial Government Scholarship(<3%) | 2021 |
| • Zhejiang University 2nd Class Scholarship | 2022 |
| • Optics Valley Scholarship(<1%) | 2022 |

MISCELLANEOUS

- **GitHub:** <https://github.com/Xuer04>
- **Languages:** English(Fluent), Chinese Mandarin(Native)