Zhou Jichong

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EDUCATION

Shanghai Jiao Tong University QS Top100 985 Sep 2021 - Mar 2024
Electronic information Master Shanghai
Recommend exemption from examination, GPA:3.7/4.0, 2021, 2022 first-class academic scholarship

Beijing Institute of Technology 985 Sep 2017 - Jun 2021
Measurement and Control Technology and Instruments Bachelor Beijing
GPA 91/100(**Rank 1st**), **National Scholarship** in 2019, **Xiaomi Special Scholarship** in 2020 (**5** in the whole school), Beijing Outstanding Graduates, Outstanding Students

HONORS & AWARDS

Mathematics Contest in Modeling (Worldwide Competition) Meritorious Winner (First Prize)
Mathematics Competition of Chinese College Students National Third Prize
China Undergraduate Mathematical Contest in Modeling National Second Prize
National Optoelectronic Design Competition Second Prize in North China

PUBLICATIONS

- Arbitrary wavefront uncertainty evaluation for the Shack-Hartmann wavefront sensor using physical optics propagation
  Jichong Zhou, Qiaozhi He, Yuan Qu, Dineng Zhao, Jiamiao Yang **Applied Physics Letters** (SCI Q2 **Top**, IF 4.0)
- A large dynamic range Shack-Hartmann sensor approach based on spots adaptive matching (To be submitted)

PROJECT EXPERIENCE

Shack-Hartmann wavefronts sensor research and development Jun 2021 - Feb 2023
Independent research and development Shanghai
The Shack-Hartmann wavefront sensor (SHWS) is a high-presition non-interferometric wavefront measurement technique

- Design and selection of components according to R&D specifications
- Research papers on SHWS and implement image processing and numerical computation algorithms using MATLAB
- Building a virtual instrument for SHWS on MATLAB using Fourier optics and analyzing the errors
- SHWS structural design using Solidworks and software development using Python and PyQt

Stereo vision system development Dec 2020 - Jun 2021
Algorithm and Software Development Shanghai
The stereo vision system is composed of two industrial cameras and a projection module for 3D shape measurement

- Familiar with stereo vision principles. Completion of camera calibration, aberration correction, and stereo matching
- Developing software with PyQt . The system achieves sub-millimeter measurement accuracy in the depth direction
- Patent "Based on differential projection stereo vision detection method and detection device", the third inventor

WORK EXPERIENCE

Huawei Technologies Co., Ltd. Jul 2023 - Present

Camera Department - Media Algorithms
Participate in camera simulation work in the Camera Simulation Group, build end-to-end simulation model of camera from optical imaging to image process. I am mainly responsible for physical optics simulation using C/C++ and Python.

skills and others

- **Skills:** Python, MATLAB, C/C++, PyQt, OpenCV, SolidWorks, Image Processing, Numerical Computation, Data Structures, Deep Learning Fundamentals.
- **Languages:** English (CET-6), English (CET-4)
- **Interests:** guitar, basketball

Community and organizational experiences

Teaching Assistant, Shanghai Jiao Tong University Sep 2021 - Dec 2021
Members of voluntary associations Sep 2017 - Jun 2018