Hong Si Cheng

Gender: Male   Date of Birth: 07/11/2001

Block X-57 , Shanghai Jiao Tong University , Shanghai , China

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EDUCATION

09/2023-Present Shanghai Jiao Tong University , Ph.D. Student   **Shanghai**

Research Interest: Vision-based target vibration and displacement measurement

Supervisor: Assoc Prof. Xiong Yuyong

09/2019-06/2023 Shanghai Jiao Tong University , Undergraduate   **Shanghai**

Major: Mechanical Engineering (Pilot Class)

Total GPA: 3.57 / 4.30   Rank: 14/31

Core modules: Calculus I/II, Design and Manufacture, Mechanical Vibration

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RESEARCH EXPERIENCE

12/2020-08/2021 Shanghai Jiao Tong University   **Shanghai**

State Key Laboratory of Mechanical System and Vibration

Core Member of Project *Long Range Measurement of Wire Diameter by UAV*

- ✧ Conducted independent research on algorithm of wire detection and measurement based on Hough Transform.
- ✧ Completed relative part of the patent based on the fruit of research.

03/2022-07/2022 Shanghai Jiao Tong University   **Shanghai**

Independent research on *Investigation of Soviet Union Passive Bug* under the supervision of Assoc Prof. Yuyong Xiong, Shanghai Jiao Tong University.

- ✧ Conducted literature research and electromagnetic field stimulation by HFSS.
- ✧ Rebuilt bug model and investigated radar stimulation and response of the bug.

Intended goal: *Propose a new theory of the mechanism of the passive bug. Propose a resonant frequency of the bug. Investigate the bug model's reaction of radar stimulation.*

INTERNSHIP EXPERIENCE

06/2022-07/2022 The Fraunhofer Project Center for Smart Manufacturing   **Shanghai**

Designed an innovative assembled model for the project *Integrated Module of Projector and Cameras of Intelligent Interactive Assembly Table* using UGNX software.

HONORS AND AWARDS

11/2020   Three Good Student of Shanghai Jiao Tong University for academic year 2019-2020

12/2020   Blaser Swisslube Scholarship (Third Prize) of Shanghai Jiao Tong University

10/2021   Three Good Student of Shanghai Jiao Tong University for academic year 2020-2021

12/2021   Blaser Swisslube Scholarship (Third Prize) of Shanghai Jiao Tong University

08/2022   Second Prize of the 10th National College Students Innovative Mechanical   **Shenzhen**

Design Competition

RESEARCH INTERESTS

Vision-based Measurement, Full-field Microwave Sensing, Image Processing and Analysis

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SKILLS, CERTIFICATIONS & OTHERS

Language Proficiency:

- ◇ TOEFL: 102 (Reading: 30)

- ◇ Chinese (Native Language)

Professional Skills:

- ◇ 3D Modeling Software: UGNX

- ◇ Programming Language: C++ , Python

- ◇ Experienced in MATLAB, HFSS, Proteus, Keil uVision, etc.

- ◇ Familiar with Windows, Microsoft Office.