

Yuan Yao

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EDUCATION

- **Jilin University** 2021.9-now
School of mechanical and aerospace engineering GPA and Percentage: 3.76/4, rank within top 5%
- **Tohoku University** 2023.10-2024.8
Exchange student, Robotics division Junior Year Program in English (JYPE program)

RESEARCH EXPERIENCES

- **Micro Electro Mechanical Systems Lab; Tanaka Shuji Laboratory** 2023.10-2024.8
Exchange student advised by Prof. Shuji Tanaka and Assistant Prof. Andrea Vergara Tohoku University
 - **Oral presentation** on the 37th International Microprocesses and Nanotechnology Conference (MNC 2024) [Slides] [Abstract]
 - A paper under review for the conference extended special issue: **Yuan, Y.**; Vergara, A.; Tanaka, S. Feasibility study of layer separation using 2D patterned internal laser damage in silicon. *Japanese Journal of Applied Physics* [Paper manuscript]
 - Experienced in clean room workflows and equipment operation:

Mask design	Mask Fabrication	Photolithography	Deep silicon etching (DRIE)
Sputtering	Ion beam milling	PVD/CVD	Optical/SEM/Infrared microscopy
- **Key Laboratory of CNC Equipment Reliability, Ministry of Education** 2022.9-now
Undergraduate research program advised by Prof. Hu Huang Jilin University
 - National Undergraduate Training Program for Innovation and Entrepreneurship (NCSIETP), **National Excellent Conclusion, securing research funding of 10,000CNY**
 - Publish an Utility Model Patent: H. Huang, **Y. Yao**, Y. Huang, and H. Wu, “An ultrasonic vibration device for vibration-assisted scratch testing,” Chinese Patent CN 220649966U, Mar. 22, 2024. [Patent content]
 - Published a paper: Huang, Y.; Wu, H.; **Yao, Y.**; Zhao, H.; Huang, H. An Ultrasonic Vibration Scratch Tester for Studying the Scratch Characteristics of Materials under Ultrasonic Vibration Contact Status. *Actuators* 2024, 13, 262. <https://doi.org/10.3390/act13070262>

SKILLS

- **Languages:** Native Mandarin; Fluent English including IELTS: 7.0 (6.5), CET4: 622, CET6: 559, GRE: 320; Basic Japanese
- **Professional Software:** Proficient: Solidworks, Autocad; Intermediate: Catia; Ansys, Abaqus, Recurdyn; Matlab Simulink, Origin
- **Basic Programming Skills:** Python, Matlab, C#, L^AT_EX

HONORS AND ACHIEVEMENTS

- **National second prize**-National University Students' Advanced Drawing Technology and Product Information Modeling Innovation Competition
Content: Advanced Engineering drawing and proficient in CAD software **Blog link:** [EN] [CH] 2022.8
- **Provincial first prize** -China College Students Engineering Practice and Innovation Competition
Content: Designed and fabricated an auto-turning mini-car prototype **Blog link:** [EN] [CH] 2023.11
- **Scholarship for Study in Japan under Agreement**-Japan Student Services Organization 2023.10-2024.8
- **First-class scholarship** -Jilin University 2023.11/ 2022.11
- **Excellent student** -Jilin University 2023.11/ 2022.11
- **Excellent student leader** -School of Mechanical and Aerospace Engineering, Jilin University 2022.11