



# Feiyang Pan

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 Hefei, China

## Education

SEP 2022 –  
PRESENT



### University of Science and Technology of China (USTC)

Division of Precision Machine and Precision Instrument, School of Engineering Science

Research Topic: *Ultrasound System and Ultrasound Imaging Algorithm*

GPA: 3.96/4.30, rank 6/132

SEP 2018 –  
JUN 2022



### University of Electronic Science and Technology of China (UESTC) & University of Glasgow (UoG)

B.Sc. in Electronic and Information Engineering, Glasgow college, UESTC

Research Topic: *Fault Diagnosis Algorithm Design for Industrial Equipment*

GPA: 3.87/4.0, rank, 21/231, First Class Honours Degree

## Research Interests

- **Signal/Image Processing:** denoising method, object detection, image reconstruction.
- **Prognostics and health management (fault diagnosis, non-destructive testing):** intelligent sensor method, ultrasound method, simulation and modeling.

## Publications

- **Pan, F.**, Liu, Z., Ren, L., Yang, L., & Zuo, M. Ensemble fault detection based on magnetic flux leakage images with noise robustness for steel wire ropes. (under review)
- **Pan, F.**, Liu, Z., Ren, L., & Zuo, M. (2023). Adaptive local flaw detection based on magnetic flux leakage images with a noise distortion effect for steel wire ropes. *IEEE Transactions on Industrial Electronics*. (IF = 7.7)
- **Pan, F.**, Huang, Y., Ren, L., & Liu, Z. (2023, October). Inspection of Wire Ropes Based on Magnetic Flux Leakage Images by Using YOLOv5. In *2023 Global Reliability and Prognostics and Health Management Conference (PHM-Hangzhou)* (pp. 1-7). IEEE.
- **Pan, F.**, Ren, L., Zhou, J., & Liu, Z. (2022, March). Fault classification based on computer vision for steel wire ropes. In *Journal of Physics: Conference Series* (Vol. 2184, No. 1, p. 012035). IOP Publishing.

## Research Experience

SEP 2020 –  
PRESENT

### Research Assistant

**School of Mechanical and Electrical Engineering, UESTC**

Design fault diagnosis algorithms for non-destructive testing of steel wire ropes under complex noise condition. Simulate the magnetic flux field by Ansys-Maxwell to improve the inspection equipment.

SEP 2022 –  
PRESENT

### Graduate student

**School of Engineering Science, USTC**

Study the impact of biological tissue (e.g. skull) to ultrasound wave by numerical simulation method. Design ultrasound/photoacoustic imaging algorithm.

## Awards & Honors

FEB 2024

Scholarship for graduate student

OCT 2023

Co-authored IEEE-PHM paper get the best paper award in PHM-Hangzhou 2023

SEP 2022	USTC Freshman Scholarship
JUN 2022	Sichuan Province Outstanding Undergraduate Award (Top 3%)
JUN 2022	UESTC Outstanding Undergraduate Award
APR 2021	Mathematical Contest in Modeling (MCM), Honorable Mention
OCT 2020	China Undergraduate Mathematical Contest in Modeling (CUMCM), National-level first prize (Top 2%)

## Professional Skills

- **Programming:** MATLAB, Python, LaTeX
- **Software:** Ansys Maxwell, K-Wave, Amira
- **Languages:** (Mandarin) Chinese, English (IELTS 7.0)

## Extracurricular Activities

- **Badminton:** Level 3 according to Chinese Badminton Association
- **Fishing:** Fishing experience in rivers, lakes and sea