Feiyang Pan

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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 and Artificial Intelligence**: denoising method, object detection.
- **Prognostics and health management (fault diagnosis, anomaly detection)**: 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 to enhance the quality of images.

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