Yuanlv Chen
(Also spelled as: Yuanlyu Chen)

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EDUCATION

University of Electronic Science and Technology of China   Chengdu, China
B.E. in Industrial Engineering, School of Mechanical and Electrical Engineering   2020 - 2024

GPA: 3.43 / 4.0
Highlighted courses (score): Probability and Mathematical and Statistics (86), Engineering Mechanics (86), Stochastic Process and Its Applications (92), Operations Research (85), Systems Engineering (88), Reliability Engineering (90)

RESEARCH EXPERIENCE

Undergraduate Research   2022 - 2023
School of Mechanical and Electrical Engineering, UESTC   Advisor: Prof. Yan Shi
Publication: Uncertainty Analysis of Structural Output with Closed-Form Expression Based on Surrogate Model.

Research Assistant   2023 - Present
Center for System Reliability and Safety, UESTC   Advisor: Prof. Tangfan Xiahou
Project: Reliability Analysis of the Control Rod Mechanism.

Research Assistant (Remote)   2024 - Present
SCALE Lab, Northwestern University   Advisor: Prof. Yiping Lu
Project: Online Dynamic Mode Decomposition through Debiasing.

PROJECTS

UESTC Innovation Training Program   2022 - 2023
Application software for the reliability prediction of electronic products in medical devices and systems.

Reliability Analysis of Diesel Engines   2023
A reliability engineering project, analyzing data validation, making statistical discoveries and predicting future failure modes and frequency based on the real maintenance log of oil pump.

PUBLICATIONS

Yuanlv Chen, Yan Shi, Hong-Zhong Huang, Dong Sun, and Michael Beer. **Uncertainty Analysis of Structural Output with Closed-Form Expression Based on Surrogate Model.** Probabilistic Engineering Mechanics 73 (July 2023): 103482.

ONGOING RESEARCH

Yuanlv Chen, Tangfan Xiahou. **Reliability Analysis of the Control Rod Drive Mechanism Based on Physics-informed Neural Networks.**

Ruihan Xu, Yuanlv Chen, Yiping Lu. **Online Dynamic Mode Decomposition through Debiasing.**

OTHERS

Programming Languages
Familiar: MATLAB, Python
Basic: C, C++, Javascript

Languages
Mandarin Chinese (Native), English (Proficient), Cantonese (intermediate)

Extracurricular Experiences
I play for the football (soccer) team of UESTC's School of Mechanical and Electrical Engineering.
In addition, I am an amateur badminton and billiards player. I am also an enthusiast of literature and history.