Qi Li

Personal Data

Name	Qi Li	**Nationality**	P.R. China
Date of Birth	1997.07.18	**Cell Phone**	+86 18896782803
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Education Background

- **M.E.** in **Control Theory and Control Engineering**，*Soochow University (SUDA)*
  Overall GPA: 3.86/4.0 **Rank:** top 1%   Sep.2019~Present
  Supervisor: Prof. Liang Chen & Prof. Changqing Shen
- **B.E.** in **Electrical Engineering**，*Soochow University (SUDA)* (211 project)
  Overall GPA: 3.7/4.0   **Rank:** top 10%   Sep.2015~Jul.2019

Research Publication

[1] L. Chen (Supervisor), **Q. Li**, C. Shen et al. "Adversarial domain-invariant generalization: a generic domain-regressive framework for bearing fault diagnosis under unseen conditions," IEEE Trans. Ind. Informatics., accepted, 2021. (JCR Q1, Impact Factor: 10.215)

[2] **Q. Li**, C. Shen, L. Chen, et al. "Knowledge mapping-based adversarial domain adaptation: A novel fault diagnosis method with high generalizability under variable working conditions," Mech. Syst. Signal Process., vol. 147, 2021. (JCR Q1, Impact Factor: 6.823)

[3] **Q. Li**, L. Chen, C. Shen et al. "Enhanced generative adversarial networks for fault diagnosis of rotating machinery with imbalanced data," Meas. Sci. Technol., vol. 30, no. 11, 2019. (JCR Q3)

[4] **Q. Li**, S. Liu, B. Yang, Y. Xu, L. Chen, and C. Shen, "Adversarial multi-domain adaptation for machine fault diagnosis with variable working conditions," 2020 IEEE 18th International Conference on Industrial Informatics (INDIN), 2020, pp. 737-741.

[5] B. Yang, **Q. Li**, L. Chen et al. "Bearing Fault Diagnosis Based on Multilayer Domain Adaptation," Shock Vib., 2020.

Research Project

2019~Present	**Graduate Research Assistant**, in the project "Research on Deep Transfer Learning Method for Health State Recognition of Rotating Machinery under Variable Working Conditions" (The National Natural Science Foundation of China, Grant No. 51875375)

Supervisor: Prof. Liang Chen & Prof. Changqing Shen

Personal Responsibility:
1) Conducting a research and investigation process;
2) Implementation of the diagnosis code based on Pytorch;
3) Creation of bearing fault diagnosis models under variable working conditions;
4) Multi-source bearing signal processing from different working conditions;
5) Achieving an adversarial domain generalization diagnosis model;
6) Writing the initial manuscripts and the published works.

2018~2019	**Research Assistant**, in the project "Research on Feature Deep Learning and Condition Monitoring of Variable Scale Morphological Filtering Signal for Mechanical Equipment" (The National Natural Science Foundation of China, Grant No. 51505311)

Qi Li

Supervisor: Prof. Liang Chen & Prof. Changqing Shen

Personal Responsibility:

1) Extracting effective information of the bearing in a noisy environment;
2) Feature extraction of bearing based on convolutional neural network.

2017~2019   **Principal Investigator**, in the innovation and entrepreneurship project of college students in Jiangsu Province, "Multi-modal Feature Identification and Diagnosis of Mechanical Fault Based on GANs" (The project was awarded as an outstanding project.)

Supervisor: Prof. Liang Chen & Prof. Changqing Shen

Personal Responsibility:

1) Arranging research progress; Project and model design;
2) Data collection of mechanical bearing faults; Preprocessing of bearing vibration signal;
3) Programming based on Pytorch; Creation of the initial manuscript and the published work.

Award & Honors

2020~2021   Outstanding Student Cadre of Jiangsu Province.

Outstanding postgraduate cadre of Soochow University.

Best 3-minute thesis presentation of UWA (University of West Australia).

Special Partner Scholarships under UWA Research Skills Fundamentals Program.

National Scholarship by Ministry of Education of China.

2019~2020   Outstanding postgraduate of Soochow University.

Special award of graduate academic scholarship.

Honorable Mention of the China Mathematical Modeling International Competition.

2018~2019   Outstanding graduate of Soochow University.

National Encouragement scholarship.

2017~2018   Outstanding student cadres of Soochow University.

Third prize of Jiangsu Higher Mathematics Competition.

2016~2017   Comprehensive Award of Soochow University.

Outstanding student cadres of Soochow University.

Third Prize in Higher Mathematics Competition of Soochow University.

2015~2016   Comprehensive Award of Soochow University.

Excellent first-class learning scholarships.

Social Work Award of Soochow University.

Enterprise Endowment Scholarship of Soochow University.

Social Activity

2019 ~ 2021   Deliver a speech at the opening ceremony of *SUDA* as a graduate student representative.

Class president of graduate students.

Soochow University Marathon*2 (Ranking 13/671 in 2019; Ranking 23/613 in 2020).

2017~2019   Vice Chairman of Mental Health Association of Soochow University.

Others

Skills: CET6 (490), Python, MATLAB, Pytorch, TensorFlow, Visual C, Office, PLC.

Hobby: Marathon, Positive Psychology, Workout.