

Renzong Lian

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EDUCATION

Beijing Institute of Technology

Beijing, China

Master of Science in Mechanical Engineering

Sep. 2018-Present

- Instructor: Prof. Huachun Tan
- Research interest: Reinforcement Learning, Transfer Learning, Hybrid Electric Vehicle, Energy Management

Fuzhou University

Fuzhou, China

Bachelor of Engineering in Vehicle Engineering

Sep. 2013-July. 2017

- Overall GPA: 2.96/5 (79.2/100), Ranking: 24/64

Awards & Honors:

- **Excellent Graduate Paper**, Fuzhou University. 2017
- **Second Prize in Cost and Manufacture Event of 2016 Formula Student China Competition**, Society of Automotive Engineers of China. 2016
- **Second Prize in Mechanical Innovation Competition of Fujian Province**, Fujian Educational Bureau. 2015

PUBLICATIONS

- **R. Lian**, J. Peng, Y. Wu, H. Tan, and H. Zhang, "Rule-interposing deep reinforcement learning based energy management strategy for power-split hybrid electric vehicle," *Energy*, vol. 197, p. 117297, 2020.
- **R. Lian**, H. Tan, J. Peng, Q. Li, Y. Wu, "Cross-type transfer for deep reinforcement learning based hybrid electric vehicle energy management," *IEEE Transactions on Vehicular Technology*. (Under review)
- R. Han, **R. Lian**, H. He, X. Han, "Deep reinforcement learning based energy management strategy for a hybrid electric tracked vehicle including lateral dynamics," *Applied Energy*. (Under review)

PROJECT EXPERIENCE

Formula Student China Competition

Fuzhou, China

Team Leader, Fuzhou University

Jan. 2015-Dec. 2016

Advisor: Yuhui Peng, School of Mechanical Engineering and Automation, Fuzhou University

- Designed and manufactured the frame of formula car, and realized the arrangement of chassis system
- Analyzed the mechanical characteristics of automobile components, and optimized their topology structure and parameters by finite element method

Student Research Training Program

Fuzhou, China

Project leader, Fuzhou University

May 2016-May 2017

Advisor: Dingqi Xue, School of Mechanical Engineering and Automation, Fuzhou University

- Applied robot welding technique on the manufacture of automobile components, and analyzed the mechanical properties of welding coupon.

Mechanical Innovation Competition of Fujian Province

Fuzhou, China

Project leader, Fuzhou University

Oct. 2014-May 2015

Advisor: Xiezhao Lin, School of Mechanical Engineering and Automation, Fuzhou University

ACADEMIC ACTIVITIES

International Conference on Applied Energy

August 12-16, 2019, Västerås, Sweden

Oral Presentation

- Deep reinforcement learning based energy management of hybrid electric vehicle with expert knowledge

SKILLS

- Programming: Python
- Tools: TensorFlow, MATLAB, Sumo, Latex, AutoCAD, Solidworks, ANSYS