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Date of Birth: October 29th, 1997
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RESEARCH INTERESTS

Electric machines design and optimization, Machine control.

EDUCATION BACKGROUND

09/2021 – Now	The Hong Kong Polytechnic University (PolyU) Department of Electrical and Electronic Engineering, Faculty of Engineering Doctor of Philosophy in Electrical Engineering GPA: 3.49/4.3 Supervisor: Prof. NIU Shuangxia
09/2020 - 06/2021	The Hong Kong Polytechnic University (PolyU) Department of Electrical Engineering, Faculty of Engineering Master of Science in Electrical Engineering (Mixed-mode) GPA: 3.46/4.3 Supervisor: Prof. FU Weinong
09/2016 - 06/2020	Shanghai Maritime University (SMU) College of Logistics and Engineering Bachelor of Engineering in Electrical Engineering and Automation GPA: 3.39/4

ACADEMIC ACHIEVEMENTS

12/2022	PolyU Award of Outstanding Performance in TPS Teaching
06/2021	Graduate with credit from PolyU.
04/2020	Graduate with honor from SMU.
10/2019	Third class scholarship of SMU, “Merit Student of SMU”.
10/2018	First class scholarship of SMU, “Outstanding Student of SMU”, Scholarship of China Merchants Heavy Industry (Jiangsu) Co., Ltd.
10/2017	Second class scholarship of SMU.

PUBLICATION

- [1] **M. Jiang**, W. Fu* and S. Niu, "Design and Analysis of a Novel Dual-Airgap Dual Permanent Magnet Vernier Machine," in *IEEE Access*, vol. 9, pp. 57188-57197, 2021, doi:

10.1109/ACCESS.2021.3072918.

- [2] **M. Jiang** and S. Niu*, "Novel Mechanical Flux-Weakening Design of a Spoke-Type Permanent Magnet Generator for Stand-Alone Power Supply," *Applied Sciences*, vol. 13, no. 4, p. 2689, Feb. 2023, doi: 10.3390/app13042689.
- [3] **M. Jiang** and S. Niu*, "A Novel Consequent-Pole Contra-Rotating Machine with Zero-Sequence Current Excitation," in *IEEE Transactions on Magnetics*, doi: 10.1109/TMAG.2023.3272952.
- [4] **M. Jiang** and S. Niu*, "A High-Order Harmonic Compound Rotor Based Brushless Dual-Electrical-Port Dual-Mechanical-Port Machine," in *IEEE Transactions on Industrial Electronics*, doi: 10.1109/TIE.2023.3294574.
- [5] C. Huang, L. Xiong, Y. Gong, **M. Jiang*** and S. Niu, "Tangential Electromagnetic Force Array on the Vibration and Noise of Electric Axle for New Energy Vehicle," in *IEEE Access*, vol. 11, pp. 100001-100009, 2023, doi: 10.1109/ACCESS.2023.3314758.
- [6] **M. Jiang**, K. Zhao, W. Wang, and S. Niu*, "A Novel Brushless PM-Assisted DC Motor with Compound-Excited Circular Winding," *Sustainability*, vol. 15, no. 18, p. 13924, Sep. 2023, doi: 10.3390/su151813924.

FIELD / TEACHING EXPERIENCE

07/2023	Participated in the application of "Advanced Electric Propulsion System for Transportation Electrification" under the Area of Excellence (AoE) project of University Grants Committee (UGC), HKSAR: Responsible for the verification of principle of a new dual electromechanical port aeromotor and a dual-rotor marine motor and the proposal writing.
10/2022	Participated in the application of "A high-order-harmonic compound rotor based brushless dual-mechanical-port dual-electrical-port wind generator with flywheel" under the Innovation and Technology Fund (ITF) of the Innovation and Technology Commission (ITC), HKSAR: Responsible for the verification of principle, preliminary electromagnetic dimensioning and proposal writing.
10/2021	Participated in the application of "Consequent-Pole Dual Permanent Magnet Vernier Contra-Rotating Machine with DC-saturation relieving for ship propulsion" under the Innovation and Technology Fund (ITF) of the Innovation and Technology Commission (ITC), HKSAR: Responsible for the verification of principle, preliminary electromagnetic dimensioning and proposal writing.
07/2019	One-week internship in China Merchants Heavy Industry (Jiangsu) Co., Ltd.
09/2017 - 05/2018	Assistant of 17' EE undergraduates' counselor. <ul style="list-style-type: none">● Assisting counselor's daily work.● Solving freshmen's questions, helping them to quickly adapt the college life.

TECHNICAL / LANGUAGE SKILLS

Technical skills: MATLAB/Simulink, ANSYS Maxwell 2D/3D, Altium Designer, C

Language skills: IELTS 7.5