CURRICULUM VITA

Personal Information

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Education

• 08/2018- present PhD candidate, Computer Science, University of Macau, Macau.

(THE 193/QS 254, China University "C9 League+")

• 08/2014-07/2018 M.Sc. degree, Electromechanical Engineering,

University of Macau, Macau.

• 09/2009-07/2013 B.Sc. degree, **Excellent Experimental Class**, Mechanical and

Automation Engineering, Shandong University of Technology,

Shandong, China.

English Level

CET6, TOEFL, GRE

Research Interests

- Intelligent robotics: motion planning, mobile robot, robot calligraphy
- Machine learning: generative learning, graph neural networks, knowledge graph

Research Experiences

- 2021-present **State Key Laboratory of Internet of Things for Smart City,**University of Macau. Researching on intelligent robotics, machine learning.
- 2018-2021 **Software Engineering Lab,** University of Macau. Researching on robot control, Kinematics analysis, GUI design, calligraphy reproduction.
- 2014-2018 Mechatronics Lab, University of Macau. Researching on mobile robot design, motion analysis, and intelligent control with SolidWorks, Protel DXP, LabVIEW and MATLAB, etc.
- 2009-2013 Parallel Robot Innovation Lab, Shandong University of Technology. Researching on mechanical design, Printed Circuit Board (PCB) design, 3D model rendering, single-chip microcomputer design with SolidWorks,

AutoCAD, Protel DXP, LabVIEW, etc.

Teaching Experiences

- 2019.01-2021.05 **Teaching Assistant (in English),** Faculty of Science and Technology, University of Macau
 - * English Language Centre Teaching assistant certificate
 - * Object-Oriented Analysis and Design Patterns (2018/2019)
 - * Principles and Applications of Concurrent Programming (2018/2019)
 - * Information Technology Fundamentals and Practices (2020/2021)
- 2019.08-present **Resident Tutor,** Lui Che Woo College, University of Macau.
- 2016.11-2017.12 **House Tutor,** Postgraduate House, University of Macau.

Publications

- * Xiaoming Wang, Yilong Yang, Weiru Wang, Yuanhua Zhou, Yongfeng Yin and Zhiguo Gong. Generative adversarial networks based motion learning towards robotic calligraphy synthesis. CAAI Transactions on Intelligence Technology (JCR Q1/5.1), 2023. https://doi.org/10.1049/cit2.12198
- * Xiaoming Wang, Zhiguo Gong. Style Generation in Robot Calligraphy with Deep Generative Adversarial Networks. Applied Intelligence Journal (JCR Q2/ IF 5.3), Preprint. https://doi.org/10.48550/arXiv.2312.09673
- * Xiaoming Wang, Peng Liu, Ruidong Xi, Zhiguo Gong. Enhancing Calligraphy Generation With Deep Generative Adversarial Networks. IEEE Signal Processing Letters (JCR Q2/IF 3.9), Preprint.
- * Qingtian Wu, **Xiaoming Wang**, Liming Zhang, etc. YOLOLandmark: an End-to-End Deep Network for Real-time Face and Its Dense Facial Landmark Detection. IEEE Transactions on Industrial Informatics (**JCR Q1/IF 12.3**), Preprint.
- * Qingtian Wu, **Xiaoming Wang**, Lei Dai, Fei Richard Yu and Liming Zhang. A Real-Time Multi-Task Learning System for Joint Detection of Face, Facial Landmark and Head Pose. IEEE Internet of Things Journal (**JCR Q1/IF 10.6**), Preprint. https://arxiv.org/abs/2309.11773
- * Xiao Xiao, Yangmin Li and **Xiaoming Wang**. Configuration Analysis and Design of a Multidimensional Tele-operator Based on a 3-P(4S) Parallel Mechanism. Springer Journal of Intelligent & Robotic Systems, 2018. (**JCR Q3/IF 3.3**) https://doi.org/10.1007/s10846-017-0663-x
- * Jinliang Gong, **Xiaoming Wang**, Fengan Huang, Yanfei Zhang. Dynamic performances analysis of hybrid press based on dependent generalized

- coordinates. Journal of Mechanical Engineering Science, 2015. (**JCR Q3/IF 2.07**) https://doi.org/10.1177/0954406214557342
- * 《Data for intelligent operation and maintenance of bridge-island-tunnel crossings— Common structural element information》 (T/GBAS 68-2023), Guangdong-Hong Kong-Macao Greater Bay Area Standards Promotion Council of Guangdong Province, 2023. (Co-author)

Projects/Funding

- * 2019.12-2023.11, Integrated application of intelligent operation and maintenance technology for the Hong Kong-Zhuhai-Macao Bridge. National Key Research & Development Program of China. (Grant no: 2019YFB1600704, RMB 1830800, Main contributor)
- * 2017-2019, Model-Driven Software Development from Requirement Description to Code Generation. Science and Technology Development Fund. (Grant no: MYRG 2017-00141-FST)

Academic activities

- * 2021-present, IEEE Robotics and Automation Society, membership, Macau
- * 2021-present, IEEE Young Professionals Program, Macau
- * Served as a reviewer of IEEE/ASME Transactions on Mechatronics, CAAI Transactions on Intelligence Technology, etc.
- * Served as a volunteer for IJCAI 2023.

Internship

* 2023.05-2023.11, Zhuhai UM Science & Technology Research Institute (ZUMRI).

Certificates

- * Web of Science Academy Certificates: Good Citation Behavior; Introduction to Peer Review; Introduction to Ethical Publishing Behavior; Reviewing in the Sciences.
- * Mental Health First Aid (MHFA) Standard Course. The Mental Health Association of Hong Kong. (2023.03)
- * College team of table tennis. Captain/Instructor. Lui Che Woo College. (2019-2023)
- * University team of table tennis, University of Macau. (2015-2018)
- * Calligraphy Club, President/Advisor. University of Macau. (2015-2018)
- * Chinese Mandarin Test, secondary-level A. (2012.10)

Awards

- * 2018-present, PhD Research Assistant scholarship, University of Macau
- * 2019-2021, PhD Teaching Assistant scholarship, University of Macau
- * 2015-2018, Master Research Assistant scholarship, University of Macau
- * 2011-2014, School scholarship, Shandong University of Technology
- * 2012, Specialized scholarship of Scientific and Technological, SDUT
- * 2012, Second prize of the Twelfth Session "The Challenge Cup" Shandong University Student Extracurricular Academic Science and Technology Work Competition
- * 2011, Excellent/Second prize of National 3D Innovation Design Competition
- * Provincial Second Prize in Mathematics Olympiad
- * Calligraphy Competition Awards: First Prize in Shandong University of Technology Calligraphy Competition; Outstanding Prize (2018), Third Prize (2019), Third Prize (2019) of Brush Calligraphy Competition in University of Macau; First Prize of Handwritten Miniature Poetry Competition (2019) in University of Macau.

Referees

Prof. Zhiguo GONG (鞏志國) -PhD Supervisor

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More info

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