Yuxing Wang

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EDUCATION

TSINGHUA UNIVERSITY *2020.08-2023.07(expected)*
• *M.Sc. in Electronic and Information Engineering*
• Cumulative GPA: **3.89/4.00**, Rank: **2/45**

SOUTHWEST MINZU UNIVERSITY *2016.09-2020.07*
• *B.Eng. in Communication Engineering with Highest Honors*
• Cumulative GPA: **3.86/4.00**, Rank: **1/145**

PUBLICATIONS & PREPRINTS

• **Y Wang,** S Wu, H Fu, Q Fu, T Zhang, Y Chang, X Wang, Curriculum-based Co-design of Morphology and Control of Voxel-based Soft Robots, ***I**nternational **C**onference on **L**earning **R**epresentations 2023, 2023.01*

• T Zhang, Z Lin, **Y Wang,** D Ye, Q Fu, X Wang, X Li, Dynamics-Adaptive Continual Reinforcement Learning via Progressive Contextualization, *IEEE **T**ransactions on **N**eural **N**etworks and **L**earning **S**ystems (Revision), **JCR Q1**, **IF=14.255**, 2022.08*

• **Y Wang,** T Zhang, Y Chang, X Wang, B Yuan, A Surrogate-Assisted Controller for Expensive Evolutionary Reinforcement Learning, ***In**formation **S**ciences, **JCR Q1**, **IF=8.233**, 2021.12*

• **Y Wang,** B Yuan, From Big Data Based Price Discrimination to Privacy Leakage: Ethical Analysis and Reflections on Privacy Issues from the Perspective of Hardware and Software, ***S**cience **E**conomy **S**ociety (Chinese), 2021.10*

• **Y Wang,** Y Jiang, A Weighted Minimum Distance Classifier Based on Relative Offset, *IEEE 4th **I**nternational **C**onference on **C**loud **C**omputing and **B**ig **D**ata **A**nalysis, 2019.04*

RESEARCH EXPERIENCE

2022.09-2023.04 Research Intern: Quality-Similarity Diversity Optimization for Generating User-Preferred Game AI
Tencent AI Platform Department Funded by Tencent Rhino-Bird Research Elite Program
• Built a universal tool for quality-similarity diversity optimization, capable of generating task-specific diversity for Game AI using a set of user-specified behavior descriptors; Applied this tool to a variety of games such as Atari 2600 and "Auto Chess".

2022.04-2022.08 Research Intern: Brain-Body Co-Design for Modular Soft Robots
Tencent AI Lab Funded by Tencent Rhino-Bird Research Elite Program
• Constructed an efficient Curriculum-based Co-design method (CuCo) for Voxel-based Soft Robots (VSRs); Established a benchmark named *ModularEvoGym* that provides modular design and state-action spaces for designing and controlling 2D VSRs.

2020.01-2021.12 Project: Human versus Machine Intelligence
Tsinghua University Funded by Natural Science Foundation of China
• Constructed distributed Deep Q Networks (DQNs) and Evolutionary Strategies (ES) for training RL agents; Established the overall training framework; Expert-level players were defeated by our proposed agent model.

2018.08-2019.12 Project: A Wearable Hand Rehabilitation Robot
Southwest Minzu University Funded by National Undergraduate Training Program of Innovation & Entrepreneurship
• Built a wearable *hand rehabilitation robot* to assist patients in performing rehabilitation exercises, such as finger flexion and extension; Fabricated the robot via 3D printing; Debugged the circuit; Established a web server for collecting data.

2017.06-2018.06 Competition: International Underwater Robot Competition, 2D Simulation League
Southwest Minzu University-Peking University Joint Underwater Robot Lab
• Developed control strategies for *2D simulated fishes* using C#; Lead the group to win *First Prize* in IURC 2017 and IURC 2018.

Academic Service (Reviewer): TNNLS, INFORMATION SCIENCES, IEEE ACCESS

AWARDS AND SCHOLARSHIPS

• National Scholarship	2017-2019
• First Prize, International Underwater Robot Competition	Jul. 2017
• Honorable Mention, Mathematical Contest in Modeling	Apr. 2018
• First Prize in Central and Southwestern China Division, "TI Cup" National Undergraduate IOT Design Contest	Aug. 2018
• Bronze Award, National College Student Curricular Academic Science and Technology Works Competition	Mar. 2019
• Outstanding Graduate of Sichuan Province	Apr. 2020
• 《PEOPLE's DAILY》 Representative List of National Scholarship Winners for Undergraduate Students	Apr. 2020
• Tencent Rhino-Bird Research Elite Program	May. 2022

ACTIVITIES / SKILLS / INTERESTS

• *Activities:* Vice president of the students' robot association and mathematical modeling association (SMU), 2018-2020; Teaching assistant of "Data Mining" and "Ethics of Artificial Intelligence" (THU), Fall 2021.
• *Skills*: Python, Torch, TensorFlow, Latex, Linux and MS Office Suite; Teacher Qualification Certificate (Junior High School).
• *Interests:* Table tennis, voluntary work and bamboo flute.