WEIHAN JIANG

Shanghai Jiao Tong University, Shanghai, China

+86 15944601611

JiangWH9@sjtu.edu.cn

EDUCATION

M.S. in Department of Automation, Shanghai Jiao Tong University　　　2021 - - March 2024(expected)
Overall GPA: 3.39/4.0
Main Courses: Mathematical Optimization, System Identification, Game Theory, Graph and Networks

B.S. in Department of Automation, Harbin Institute of Technology　　　2017 - 2021
Overall GPA: 3.21/4.0
Main Courses: Matrix Theory, Modern Control, Computational Control System

PUBLICATIONS

Identifying the tracking motion pattern in rehabilitation using inverse optimal control　　Accepcted in 2023
W. Jiang, H. Zhang, Z. Wang, China Automation Congress　　　　　　　　*SJTU, China*

Statistically consistent inverse optimal control for linear-quadratic tracking with random time horizon 2022
H. Zhang, A. Ringh, W. Jiang, et al, 41st Chinese Control Conference. IEEE　　　*SJTU, China*
· The Honarable mention Award of the Twenty-Eighth "Guan Zhao-Zhi Award"

RESEARCH EXPERIENCE

Graduate Student　　　　　　　　　　　　　　　　　　　　　　　　2021 - present
Rehabilitation Robot Design Based On Human Motion Pattern Identification　　　*SJTU, China*

· Designed the robot platform, human-computer interactive interface, the real-time admittance motor controller
· Identified and validated the linear system dynamics
· Developed the identification algorithm for human motion patterns in both numerical simulations and experiments

Indepedent Developer (Undergraduate Thesis)　　　　　　　　　　　　　2019 - 2021
Telerobot Design　　　　　　　　　　　　　　　　　　　　　　　　　*Weihai, China*

· Designed the action classification program based on IMU of the Android platform
· Developed the real-time robotic arm controller on Arduino

Lead Developer　　　　　　　　　　　　　　　　　　　　　　　　　2019 - 2020
Global Localization Sensor Design For Mobile Robots　　*ROBOCON Robotics Competition Team, Weihai, China*

· Added a temperature controller to control the noises of the global localization sensor in the mobile robot
· Added the Kalman filter to reduce the estimation error
· Improved team collaboration methods, using GitHub to manage codes

Developer　　　　　　　　　　　　　　　　　　　　　　　　　　　2018 - 2019
Quadruped Robot Design　　　　　　　　　　　*ROBOCON Robotics Competition Team, Wiehai, China*

· Developed the quadruped robot controller in simulation and real experiment
· Designed the system identification method for motors and robots

SERVICE EXPERIENCE

Teaching Assisstant
Nonlinear System

2022 - 2023
SJTU, China

· Assisted the teacher in grading assignments and facilitating presentation activities

Research Assisstant
SJTU Undergraduate Medical Innovation & Design Competition

2022
SJTU, China

· Assisted a undergraduat team in conducting medical innovation research projects, including literature review, experimental design, and data analysis

AWARDS

The Honarable mention Award of the Twenty-Eighth "Guan Zhao-Zhi Award (CCC)	2022
Outstanding Graduate of Harbin Institute of Technology	2021
19th National College Student Robot Competition (ROBOCON) - First Prize	2020
18th National College Student Robot Equestrian Competition - First Prize	2019
18th National College Student Robot Competition (ROBOCON) - Second Prize	2019

TECHNICAL STRENGTHS

Programming Skills	Matlab, C, C++
Languages	Chinese (native), English (IELTS 7.5)
Development Platform	Windows, Single-chip Microcomputer(STM, Arduino), Android
Tools	Github

REFEREES

Prof. Han Zhang
Assistant Professor

SJTU, China

· Email: zhanghan_tc@sjtu.edu.cn

Prof. Jingchuan Wang
Professor

SJTU, China

· Email: jchwang@sjtu.edu.cn