Derong Jin

Email: djin001@e.ntu.edu.sg Homepage: derongjin.github.io

EDUCATION

Nanyang Technology University

Singapore

Master of Science - Computer Control and Automation

Aug. 2021 - now

- School of Electrical and Electronic Engineering (EEE).
- Courses: Machine Vision, Generic Algorithms and Machine Learning, Neural and Fuzzy Systems.

Beihang University

Beijing, China

Bachelor of Engineering - Mechanical Engineering (with honors)

Sept. 2017 - Jun. 2021

- School of General Engineering; GPA(3.76/4.00, 89.6/100); ranking (7/42).
- Courses: Calculus (99/100), Computer Science and Programming (93/100), Intelligent Robotics (96/100), Automatic Control (100/100).

PUBLICATIONS

- Yi-Jun Li, **De-Rong Jin** (joint first author), Miao Wang, Jun-Long Chen, Frank Steinicke, Shi-Min Hu and Qinping Zhao. Detection Thresholds with Joint Horizontal and Vertical Gains in Redirected Jumping. Proceedings of IEEE Conference on Virtual Reality and 3D User Interfaces (IEEE VR 2021), 95-102, 2021.
- Yi-Jun Li, Miao Wang, **De-Rong Jin**, Frank Steinicke, Shi-Min Hu and Qinping Zhao. Effects of Virtual Environments and Self-representations on Redirected Jumping. IEEE Conference on Virtual Reality and 3D User Interfaces Abstracts and Workshops (IEEE VRW 2021), 464-465, 2021.

RESEARCH EXPERIENCE

Rapid-Rich Object Search Lab (ROSE), NTU

Singapore

Postgraduate dissertation project, supervisor: Prof. Tan Yap Peng & Dr. Shan Lin

Sept. 2021 - now

o Topic: Domain Adaptation Person Re-Identification.

inDeco, R&D Center

Beijing, China

Algorithm engineering intern

Apr. 2021 - Jun. 2021

- o Topic: Search by image.
- o Topic. Search by image.

 \circ Used deep learning model to complete texture image retrieval by extracting texture features.

Peng Cheng Laboratory

Shenzhen, China

State Key Laboratory of Virtual Reality Technology and Systems

Beijing, China

Research intern, supervisor: Prof. Miao Wang & Prof. Shimin Hu

Nov. 2019 - Nov. 2020

- $\circ\,$ Topic: R
redirected jumping in virtual reality.
- $\circ\,$ Programmed with Unity 3D to create a virtual environment for the user study.
- Used SPSS, MATLAB, and Python to estimate and model the detection thresholds as 2D continuous curves rather than discrete points with simultaneous horizontal and vertical gains in redirected jumping through a novel user study.
- Conducted a comprehensive user study which investigated the effects of virtual environments and self-representations on the perception and physical performance of redirected jumping.

Human-Machine Interaction Lab

Beijing, China

Research intern, supervisor: Prof. Yuru Zhang

Jan. 2019 - Dec. 2020

- Topic: Virtual reality modeling technology based on tactile texture feedback.
- Designed a simple external device with generating tactile texture feedback to help users obtain texture feedback with different degrees of thickness and improve the authenticity of user experiences.
- This project had attented National College Students' Innovation and Entrepreneurship Training Project, which finally been awarded the Excellent Project. (the highest level, rank first in the faculty)

OTHER PROJECTS

Electronic and Control System Design of Eurobot

Nov. 2020 - Jun. 2021

Undergraduate capstone project, supervisor: Prof. Abdelkader EL Kamel & Prof. Jingjun Yu

- o Design of the whole electronic hardware system and control strategies of the small robot for Eurobot Competition 2021.
- Used STM32 and Raspberry Pi to serve as slave / master computer of the robot.
- Employed Python/C++ language to program ROS system embedded in the Raspberry Pi, C language to program FreeRTOS system embedded in the STM32.

Honors and Awards

- 2018-2020 Studies Excellent Scholarship of BUAA (Three Times, Top 10%).
- 2019 University-level Outstanding Student Cadres of BUAA (Top 5%).
- 2017 Excellent Scholarship for Freshman of BUAA (Top 5%).

EXTRACURRICULAR ACTIVITIES

• Vice President of The Student Union in The School of General Engineering.

SKILLS

• Python, C#, Unity, MATLAB, SPSS, SolidWorks, AutoCAD, CATIA, ANSYS, LaTex