XIANGXU LIN

Robotics Engineer

@ xlin10@kent.com 6045 PebbleBrook Lane Apt 92, Kent, OH 44240 330-400-8097 https://github.com/cricel

EXPERIENCE

Graduate researcher & Digital Media Manager

Advanced Telerobotics Research Laboratory

August 2018 – Present OH,USA

- Leading the team on both RoboCup 2019 simulation and physical rescue league competition.
- Research and development of human robot interaction by using Virtual Reality technology with physical components to give user a immersive control system.
- Analyze and categorize digital media content, create and maintain the database system for the lab

Teaching Assistant

Kent State University

January 2018 – Present OH,USA

- Teaching "Intro to Computer Science" lab.
- grading homework for "Algorithms" class.

Software Engineer

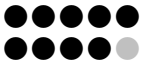
Jiu Tian Da Corporation

May 2015 – August 2015 Fuzhou,China

- Develop a JAVA based intelligent projector for multi-task purpose allowing people to create an individual workspace for separating projectable or non-projectable materials onto the screen so that it keeps private works invisible.

SKILLS

Unity, Python, ROS, Unix
C++, Web Development, Ogre 3D



EDUCATION / COURSES

Ph.D in Computer Science

Kent State University

January 2018 – Present

Master in Computer Science

Kent State University

August 2017 – January 2018

Bachelor in Computer Science

Kent State University

January 2013 – August 2017

HONORS & AWARDS

- Team Travel Award (ATR_Kent) from World Robot Summit 2018
- KSU Computer Science Travel Scholarship for WRS competition

PROJECTS

RoboCup 2019

- Developing multi-robot mapping algorithm for rescue robot automatically travel inside the simulation world and create map simultaneously and developing advanced object detection for better human recognition.
- building physical robots for search and rescue purpose by using the combination of ground humanoid robot and drone. it is a advanced version of WRS robot.

World Robot Summit(WRS) Competition

- Achieved rank 8th during the competition
- Developed a robot vision control system for robot which allows an operator controlling the robot vision by synchronizing natural head motions of the human operator so that it provides more intuitive control of the robot vision, seeing what robot is watching.
- Developed a marionette control system for robot by manipulating and synchronizing the movement of a small mannequin robot to the robot so that an operator can control the robot intuitively.
- Developed a advanced path planning system by using Gmapping algorithm and LiDAR on the robot to detect the surrounding area, to create a map and to enable auto navigation through the map.

VR Tour for intellectual disability persons

- Develop a VR & telerobotic based virtual tour system for intellectual disability persons who can experience various virtual & really activities.

Robotic Side Projects

- Used Python to write a raspberry pi and Arduino based voice control self-driving car.
- Developed a human skeleton tracking system by using ROS with OpenNI.
- Developed a racing deliver bot by using turtlebot 3 and racing wheel control system.

School Projects

- Designed a web application for housing complexes to lease their apartments. It includes front user interface and backend manager interface and functions.
- Designed a game similar to a mobile game "BEATS YouTube MP3".
- Used TensorFlow to develop an image classifier to identify the image provided