Zoey Qiuyu Chen 206-928-5538 | Aqiuyuc@cs.washington.edu | Aqiuyuchen14.github.io

Research Interest

Robot Manipulation, Computer Vision and Machine Learning

Education _

University of Washington

Seattle, US

PhD, Paul G. Allen School of Computer Science and Engineering

Fall, 2018-Present

Research Focus: Robot Manipulation, Imitation Learning. Advisor: Dieter Fox

University of Washington

Seattle, US

MS, ELECTRICAL AND COMPUTER ENGINEERING

2014-2017

 ${\it Master Thesis: 3D \, Reconstruction \, of \, Blood \, Vessel \, from \, Stereo \, X-ray \, Images. \, Advisor: \, Jenq-Neng \, Hwang}$

Xi'an Jiaotong-Liverpool University

Suzhou, China

B.Eng, Electronic and Electrical Engineering

2010 - 2014

Research focus: Lasers, Optics and Photonics. Advisor: Cezhou Zhao

Internships

Dexterous Grasping from Human Demonstration

Nvidia Robotics Lab, Seattle

RESEARCH INTERN, ADVISOR: DIETER FOX

June, 2020 - now

Work in Progress. Learning grasping policy for multi-fingered robot from human demonstration.

Weakly-supervised Object Detection and Tracking in videos

NNAISENSE, Lugano, Switzerland

RESEARCH INTERN. ADVISOR: JONATHON MASCI, CHRISTIAN OSENDORFER

Feb-August, 2018

 $Weakly-supervised\ object\ detection\ and\ tracking\ using\ a\ temporal\ dynamic\ Graph\ LSTM\ and\ a\ simplified\ Graph\ attention\ network.$

3D Skeletonization towards A Better Holoportation

Microsoft Research, Redmond

RESEARCH INTERN. MENTOR: BEN CUTLER

June-Sept, 2017

I built a system based on OpenPose which can automatically detect and estimate 3D human poses from multi-view cameras.

3D Modeling of Blood Vessels from Stereo 2D X-ray Images

National Inst. of Informatics, Tokyo

RESEARCH INTERN. ADVISOR: IMARI SATO

2015 - 2016

Reconstruct blood vessels from X-ray stereo images. The system first segments vessels using Markov Random Fields and then matches dense correspondences using vessel geometric shape in a coarse-to-fine scheme.

Publications

Virtual Blood Vessels in Complex Background using Stereo X-ray Images

QIUYU CHEN, RYOMA BISE, LIN GU, YINQIANG ZHENG, IMARI SATO, JENQ-NENG HWANG, NOBUAKI IMANISHI AND

2017

SADAKAZU AISC

BioImage Computing workshop at International Conference on Computer Vision (ICCVW), Venice, Italy

The design and simulation of p-type Si/SiGe Terahertz quantum cascade lasers

QIUYU CHEN, JINGJIN WU, ZHOU FANG AND CE ZHOU ZHAO

2014

A review of recent progress in lasers on silicon

Zhou Fang, **Qiuyu Chen**, Ce Zhou Zhao

2013

Journal of Optics and Laser Technology, vol. 46 2013, 103-110.

Journal of Optics and Laser Technology, Vol. 57, 2014, 104–109.

Other Experiences _____

Take Your First Online Dance Class with TI Sensor Tags

Kazan, Russia

MICROSOFT RESEARCH SUMMER SCHOOL. BEST PROJECT AWARD (TEAM PROJECT)

July, 2016

We built a system using TI sensor tags, that can send and receive body movement from "dance teachers" and "students", and give feedback by comparing the difference between signals.

Cabao: The Next Generation of Smart Doorway

Louisville, CO, U.S.

INTERNET OF THINGS INTERN, CABLELABS

Jun. 2015 - Sept. 2015

I built a smart doorbell system based on Raspberry Pi to enable a real-time video chat between you and your visitors. It sends a notification with a picture of visitors via email once the doorbell is pressed. I also built an android app to enable streaming video chat.

Temperature Supervision with Lower Energy Consumption

Shanghai, China

EMBEDDED SOFTWARE INTERN, R.B TECHNOLOGY CO, LTD

Jul. 2014 - Aug. 2014

I built a zigbee-based temperature supervision system to evaluate each air conditioner in a building, I did circuit design and hardware test on power consumption in order to achieve low energy consumption.

Quantum Physics Modelings

Vanderbilt University, TN, US

SUMMER INTERN, ADVISOR: KALMAN VARGA

Summer, 2013

I implemented part of a 3D Schrödinger equation solver. I also simulated electron density in H/Li atom. Additionally, I did experiments on electron density simulation between two quantum dots.

Technical Skills

Proficient in: Python, Pytorch, Linux, MATLAB.

Capable in: ROS, C/C++

Basic Knowledge: CUDA, Caffe, Tensorflow, Java