CHI ZHANG

Room 415, Mengminwei Building Zijinggang Campus, Zhejiang University Hangzhou, China, 310058 MOBILE: +86-18868112761 EMAIL: wellyzhangc@gmail.com HOMEPAGE: wellyzhang.github.io

EDUCATION

CKC Honor College

B.Eng. (Honors) in Computer Science and Technology

Zhejiang University

➤ GPA: 3.93/4.00 Rank: 1/17

SELF-PACED COURSES

Machine Learning (CS229) Stanford ➤ Stanford Online Course	2014.5
Neural Networks for Machine Learning (CSC321) University of Toronto ➤ University of Toronto Online Course	2015.6
Convolutional Neural Networks for Visual Recognition (CS231n) Stanford ➤ Stanford Online Course	2015.7
Deep Learning for Natural Language Processing (CS224d) Stanford ➤ Stanford Online Course	2015.8
Advanced Topics in Reinforcement Learning University College London ➤ University College London Online Course	2016.3
Convex Optimization (EE364a & EE364b) Stanford ➤ Stanford Online Course	2016.11

RESEARCH INTERESTS

Machine Learning

- > Deep Reinforcement Learning
- Unsupervised Feature Learning

Computer Vision

Recognition, Detection and Tracking

RESEARCH EXPERIENCE

Research Assistant 2015.3 - 2016.7

State Key Lab of CAD&CG, Zhejiang University

- ➤ Real-Time Automatic Number Plate Detection
- Community-Based Question Answering
- Advisor: Prof. Deng Cai

Research Intern 2016.7 - 2016.9

Center for Vision, Cognition, Learning, and Autonomy, UCLA

- Task Design and Real-Time 3D Scene Rendering for Robot Learning
- Advisor: Prof. Song-Chun Zhu

Research Intern 2016.9 - 2017.3

Hong Kong University of Science and Technology

- Quadrotor Reinforcement Learning for Tracking
- Visual Tracking
- Advisor: Prof. Dit-Yan Yeung

PROFESSIONAL EXPERIENCE

Software Development Coordinator

2016.3 - present

Windmill Finance

Coordinate APP development progress in a FinTech start-up with its foreign collaborator

Machine Learning Engineer

2017.4 - present

Didi Research Institute

> SLAM and perception for autonomous vehicles

PUBLICATION

CONFERENCES

Li, S., Yeung, D., Zhang, C. Learning Unmanned Aerial Vehicle Control for Autonomous Target Following. *IJCAI* 2017. Under review.

JOURNALS

Chen, Z., Zhang, C., Zhao, Z., Cai, D. Question Retrieval for Community-based Question Answering via Heterogeneous Network Integration Learning. *Neurocomputing. arXiv:* 1611.08135.

PATENTS

A Method of Exact 3D Modeling Based on Natural Gestures via Data Gloves. Publication number: CN104778746 A.

SELECTED PROJECTS

MXNet 2016.9 - present

- > Flexible and efficient machine learning library for heterogeneous distributed systems
- Regular contributor

Perceive, Attend and Memorize

2016.9 - 2017.3

- Visual tracker that incorporates detection, attention mechanism and external memory
- Ongoing research; paper to be submitted

Quadrotor Reinforcement Learning for Tracking

2016.9 - 2016.11

- Combined PID control loop and reinforcement learning algorithms to train a quadrotor to autonomously learn the concept of tracking
- Paper submitted to IJCAI 17

Real-Time Automatic Number Plate Detection

2016.2 - 2016.6

- > Trained a CNN backbone with YOLO's detection layer for fast and accurate number plate detection and regression
- ➤ Incorporated into a drive-less vehicle system
- Part of National Program on Key Basic Research Project of China (973 Program)

Exact 3D Modeling Based on Natural Gestures via Data Gloves

2014.12 - 2015.4

- Designed and manufactured a pair of data gloves for gesture detection via Adruino
- Collected data and built a *Random Forest* ensemble using C# and Python
- Second Prize in the Extracurricular Academic Work Competition, Zhejiang University
- Patented

HONORS/AWARDS

Honors & Scholarships

- Excellent Student Scholarship, Zhejiang University (3 years in a row)
- Outstanding Student Scholarship, Zhejiang University (3 years in a row)
- First-class Academic Excellence Scholarship, Zhejiang University (3 years in a row)
- Social Practice Excellence Scholarship, Zhejiang University
- First-class Research and Innovation Scholarship, Zhejiang University
- Chinese Talent Scholarship, Asahi Kasei (single recipient in the honor college)
- University Student Scholarship, Baosteel Group (6 recipients in 20,000 students)

Awards & Prizes

- Meritorious Winner of the 2015 Mathematical Contest in Modeling
- Second Prize in the Physics Innovation Competition of Zhejiang Province
- Second Prize in the Extracurricular Academic Work Competition, Zhejiang University
- Five Star Volunteer of Zhejiang University (more than 250 hours of voluntary work)

MISCELLANEOUS

Programming

- Languages: C/C++, Matlab and Python
- Frameworks: Theano and MXNet

Interests

Voluntary work related to education and social welfare

Service

- > Senior member of *The Forum for American/Chinese Exchange at Stanford (FACES)*, Chapter of Zhejiang University
- > Team leader of Department of Outgoing Global Community Development Program, AIESEC
- Member of *The Internet Association of Zhejiang University*
- Leader of a voluntary teacher group to Yongle Primary School