# Yaliang Wang

925 Dempster Apt. 2W Phone: 1 (224) 420 - 2689

Evanston, IL, 60201 Email: yaliangwang2015@u.northwestern.edu

United States Website: http://career.yaliang-wang.tk

#### Education

M.S. Computer Science, Department of Electrical Engineering and Computer Science, Northwestern University, 2014 - present.

B.E. Automation(Control), Department of Control Science and Engineering, Zhejiang University, 2009 - 2013.

## **Project**

## Mobile Management and Development

**Product Manager and Software Developer**, Social Networking Application, *December*, 2014 - March, 2015 Hybrid App Builds on HTML5, jQuery, PhoneGap<sup>TM</sup>Build & Parse.com .

## Computer Vision

Detection, Tracking of Particles and Bubbles in IV Bags, December, 2014 - present.

## Machine Learning

Handwritten Digit Recognition

December, 2014 - March, 2015

2-Layer Neural Network, 1000 hidden neurons

MNIST Dataset, 60k for training, 10k for testing

Error Rate: 3.27 % on testing

Github Video(3 mins)

Reinforcement Learning in Bipedal Walking Simulation

December, 2014 - March, 2015

#### Control

Balance Maintenance for Humanoid Robots Subjected to External Disturbance, December, 2012 - June, 2014.

#### **Awards**

Best Student Application Paper Award, IFAC ICONS 2013, 2013.

Zhejiang University 2013 Session Excellent Bachelor Thesis Award, Zhejiang University, 2013.

#### **Publications**

Yaliang Wang, Rong Xiong, Qiuguo Zhu, and Jian Chu, "Compliance Control for Standing Maintenance of Humanoid Robots under Unknown External Disturbances", 2014 IEEE International Conference on Robotics and Automation (ICRA 2014), pp. 2297-2304 Hong Kong, China, May 31 - June 5, 2014.

Yaliang Wang, Qiuguo Zhu, Rong Xiong, and Jian Chu, "Standing Balance Control for Position Control-Based Humanoid Robot", 3rd IFAC International Conference on Intelligent Control and Automation Science (IFAC ICONS 2013), pp.429-436, Chengdu, China, September 2-4, 2013.

Chao Li, Rong Xiong, Qiuguo Zhu, Jun Wu, Yaliang Wang, Yiming Huang, "Push recovery for the standing under-actuated bipedal robot using the hip strategy", *Journal of Zhejiang University-SCIENCE*, 2014.

Yaliang Wang 2

## **Exchange Experience**

Vancouver Summer Business Program, SAUDER School of Business, The University of British Columbia, *July*, 2012 - *August*, 2012.