

# Ziyan WANG

Room 206A Zijing Building #6 Tsinghua Univ., Beijing, China, 100084

Phone: (+86) 18811763608 E-mail: zy-wang13@mails.tsinghua.edu.cn

## EDUCATION

---

**Tsinghua University, Beijing**

Sep. 2013 - Present

B.E. in Automation, **Information of Science and Technology**

**GPA:** Overall: 90/100 Major: 92/100 Ranking: 7/145

**Core Courses: Math&Physics:** Calculus(100), Introduction to Complex Analysis(98), Linear Algebra, Probability and Statistics(97), Physics for Scientists and Engineers(100), Numerical Analysis and Algorithms(94,Top1)

**EECS:** Signals and System Analysis(99, Top1), Data Structures(95), Programming Fundamentals(93), C++Programme Design and Training(91),Computer Principles and Applications(94)

## RESEARCH EXPERIENCE

---

**Vision & Learning Lab, University of Michigan, USA**

July. 2016 - Sept. 2016

**Project: Multi-object Tracking by Learning Target Linking Strategy**

**Advisor: Assistant Professor Jia Deng**

- Implemented an hourglass network module for scale robust feature extraction
- Designed a neural network with the hourglass module to learn tracking strategy
- achieved higher MOT accuracy on an universal Multi Object tracking dataset(MOT15)
- Submitted to CVPR17

**Intelligent Vision Group, Tsinghua University, China**

Dec. 2015 - Present

**Project: RGB-D Object Recognition using Deep Multi-Modal Learning Architecture**

**Advisor: Associate Professor Jiwen Lu**

- Implemented a baseline structure of two-way CNN for RGB-D image.
- Proposed a multi-modal learning method for RGB-D object recognition.
- Evaluated the proposed method on two popular RGB-D recognition datasets: RGB-D Object Dataset and 2D3D Dataset and outperforms most of state-of-the-art methods.
- Submitted to CVPR17 as first author

**Broadband Network & Digital Media Lab, Tsinghua University, China**

Jan. 2015 - Nov. 2015

**Project: Highly Efficient Multi-spectrom Ghost Imaging**

**Advisor: Jingli Suo**

- Constructed an imaging system which realizes the fundamental function of ghost imaging.
- Improved the imaging system using bi-optical source to alleviate noise occurred in imaging.
- Designed an imaging modulator with DMD and films to create different modulation patterns for imaging.
- Realized a multi-channel imaging algorithm using FFT to improve the efficiency by about 300% .

## SUBMITTED MANUSCRIPTS

---

1. **Ziyan Wang**, Jiwen Lu, Ruogu Lin, Jianjiang Feng, Jie Zhou, "Correlated and Individual Multi-Modal Deep Learning for RGB-D Object Recognition", submitted to *IEEE Conference on Computer Vision and Pattern Recognition*, 2017
2. Hei Law, Xuchen You, **Ziyan Wang**, Jia Deng, "Multiple Object Tracking using Stacked Hourglass Networks", submitted to *IEEE Conference on Computer Vision and Pattern Recognition*, 2017

## AWARDS AND ACTIVITIES

---

**2016** Tsinghua Spark Program Membership(50/3000)

**2016/2015** Scholarship for Excellent Academic Performances(10/300)

**2014** Broad chairman of Tsinghua Spark Club

**2014** Second Prize in 31th China Regional College Students Physics competition(80/10000)

## COMPUTER SKILLS

---

**Basic Knowledge:** C/C++, Matlab, Python, Theano, Caffe, Lua, Torch, Linux,  $\text{\LaTeX}$