# JianfeiYang

No risk leads to disaster.

#### recent photo



#### contact

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#### languages

Chinese mother tongue English fluency

#### research

Data mining Machine learning Computer vision

#### programming

♥ Python Javascript, C++, Matlab, Latex CSS3 & HTML5 Verilog R programming

## **education**

2016-present **Doctor of Philosophy** 

Nanyang Technological University

School of Electrical and Electronic Engineering

Research Interests: **Mobile Computing** (indoor localization and smart home),

**Computer Vision** (object tracking and recognition)

2012–2016 **Bachelor** of Software Engineering

Sun Yat-sen University

School of Data and Computer Science (*Major GPA: 3.7/4.0, top 10%*) Graduate with **certificate of honor** in light of excellent scientific works.

## **experience**

2014-2015 TEACHING ASSISTANT

Sun Yat-sen University

Server for the Cloud Computing/Software Engineering Course.

2013-2014 INTERNSHIP OF VISION ENGINEER IN DJI

DJI Intern

Dedicated to visual tracking problem applied in UAV as a vision engineer.

2013–2014 **FOUNDER OF Microsoft Technology Club in Zhuhai** 

Operation

Undertake seminars and competitions for Microsoft.

2012–2013 CHAIRMAN OF STUDENT UNION

Management

The chairman of Student Union in the School of Mobile Information Engineering.

## projects

2016 Indoor localization in Smart Home

IoT lab, NTU

We utilize commercial off-the-shelf routers to localize mobile devices equipped with WiFi modules passively for smart home. The localization algorithm is based

on calibration data and machine learning algorithms.

2015 Naorrator Display Framework based on Robot Nao

Robot Nao Development

The display system is designed for The Canton Fair. I make the robot to control the PC and make presentations, whose technologies include socket, Nao-api

and markup language.

2014 **Search engine based on Wechat** 

Ke-teng Cup Application Competition

Using data mining, I combine the searching result of Taobao, Dangdang, Amazon and Jingdong business platform and get the best result according to the requirement. The server is implemented by Flash (Python) while the client is

based on Wechat.

2014 Visual system for a smart car

DJI Intern

Build a recognition system for a smart car. I use the color and texture information to recognize the extern objects and guide its direction.

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2013 Low-cost communication system based on 3G Provincial Scientific Research Project

Build a low-cost communication system based on image detection and sub-

traction, compression and transmission.

# **Publications: Conference**

2017	WiFi-based Device-Free Human Activity Recognition via Automatic Representation Learning MOBICOM Poster Han Zou, Yuxun Zhou, <i>Jianfei Yang</i> , Weixi Gu, Lihua Xie, Costas Spanos MOBICOM 2017
2017	FreeCount: Device-Free Crowd Counting with Commodity WiFi Han Zou, Yuxun Zhou, <i>Jianfei Yang</i> , Weixi Gu, Lihua Xie, Costas Spanos GLOBECOM 2017
2017	FreeDetector: Device-Free Occupancy Detection with Commodity WiFi  Workshop  Han Zou, Yuxun Zhou, <i>Jianfei Yang</i> , Weixi Gu  Workshop on Smart and Connected Indoor Environments, SECON 2017
2016	Item Sorting Platform Based on Cloud Computing Minbiao Han, Jianfei Yang, Zhou Fang, Zhiyuan Fang IEEE International Conference on e-Business Engineering 2016
2016	<b>Online Visual Tracking via Correlation Filter with Convolutional Networks</b> <i>Jianfei Yang</i> , Zheng Li, Chang-Dong Wang, Weishi Zheng IEEE International Conference on Visual Communications and Image Processing 2016
2015	Compressive Perceptual Hashing Tracking with Online Foreground Learning  Jianfei Yang, Zheng Li, Long Chen, Juanzha  IEEE International Conference on Robotics and Biomimetics 2015
2015	<b>Robust Vehicle Tracking Using Perceptual Hashing Algorithm</b> <i>Jianfei Yang</i> , Zheng Li, Long Chen IEEE International Conference of Machine Learning and Application 2015.
2015	Traffic Detection System Based on Unmanned Aerial Vehicle Integrated Analysis(UAVIA) in E-Business Logistics  Jianfei Yang, Zhaoyang Zeng, Zhou Fang IEEE International Conference on e-Business Engineering 2015

# **Publications: Journals**

2017	Non-intrusive Occupancy Sensing in Commercial Buildings		
	Han Zou, Hao Jiang, <i>Jianfei Yang</i> , Lihua Xie, Costas Spanos		
	Energy and Buildings 2017 (IF=4.067)		
2017	Compressive Perceptual Hashing Tracking with Online Foreground Learning		
2017	Compressive Perceptual Hashing Tracking with Online Foreground Learning Long Chen, Zheng Li, <i>Jianfei Yang</i>		

#### awards

May. 2017	Microsoft Imagine Cup in China, First Prize	Microsoft
March. 2017	Buildathon of Ministry of Education of Singapore, Champio	On Ministry of Education of SG
Dec. 2016	China Mobile Internet of Things Hackathons, Champion	China Mobile
May. 2016	Microsoft Beauty of Programming Challenge, Champion	Microsoft Research Asia, IEEE
Nov. 2015	National Mobile Internet Innovation Contest, First Prize	Ministry of Industry
Sep. 2015	National Undergraduate IOT Design Contest, First Prize	Ministry of Education of China
Aug. 2015	HackNTU, Intel and Migo Prize	National Taiwan University
Jun. 2015	Unique Hack Day, Rank 2nd Huazhong Univer	rsity of Science and Technology
Apr. 2015	American Mathematical Contest In Modeling, Meritorious	Winner International
Mar. 2015	Robot Hackathon in China, First Prize	ALDEBARAN
Sep. 2014	Ke-teng Cup Application Competition, First Prize	SYSU
Sep. 2013	Undergraduate First-class Scholarship and Giordano Scho	olarship SYSU
Dec. 2012	Global Management Challenge 2nd Prize in China	GMC Committee

### interests

#### professional:

- Computer vision (Object recognition and tracking, image processing)
- Android app creation (Specific design for customer)
- Software design (Qt for C/C++ and Python)
- Data mining (Participate in a intelligent transportation planning project)
- Cloud computing (Familiar with Windows Azure, SAE, GAE, etc)
- Unmanned aerial vehicle (Control and visual system)

#### personal:

- Saxophone (Toppest grade certified by the China Conservatory of Music)
- Guitar, Ukulele (Playing and singing)
- Climbing and photography (Outward Bound Trainer certified by the Ministry of human resources and social security)