# Yang Zhang

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#### **EDUCATION**

**Doctor of Philosophy** in Computer Science **CURRENT** 

University of Central Florida, U.S.

Advisor: Dr. Hassan Foroosh & Dr. Boging Gong

Bachelor of Engineering in Communication Engineering **JULY 2013** 

Chongqing University of Posts and Telecommunications, China

Thesis: "Image Enhancement using Lateral Inhibition and Compass Operator"

Thesis Advisor: Dr. Shaosheng DAI

#### RESEARCH EXPERIENCE

# CURRENT

#### Research Assistant

#### MAY 2014

#### University of Central Florida

Zero-shot Image Tagging (CVPR'16): Developed a deep learning model which ranks labels that are unseen during training for query images by exploring word vector analogy in an embedding space.

Face Anti-Spoofing: Developed an online continuous face authentication system utilizing a graph network containing LSTM and CNN to detect face-spoofing attacks by unauthorized users during video access requests.

TRECVID SIN 2014 Competition: Participated Semantic Indexing (SIN) challenge which aims to detect and classify concepts in given long untrimmed real-world videos according to near 20k real-world training videos.

JAN. 2019

#### Research Intern

FEB. 2018

TENCENT A.I. LAB USA

Developing policy generalization, or so called zero-shot transferring learning, in deep reinforcement

AUG. 2017

# **Summer Research Intern**

**MAY 2017** 

SIEMENS HEALTHINEERS USA

Developed image segmentation for both veins and implants in X-ray images using semantic segmentation neural network; Developed medical findings detection using tagging neural network;

DEC. 2016

#### Journeyman Research Fellow

AUG. 2016

UNITED STATES ARMY RESEARCH LABORATORY

Domain Adaptation for Semantic Segmentation (ICCV'17): Developed a set of data-driven supervision to transfer arbitrary segmentation CNN trained on synthetic data to real data.

# **PUBLICATIONS**

#### **Yang Zhang**

Hassan Foroosh Philip David **Boqing Gong** 

CAMOU: LEARNING PHYSICAL VEHICLE CAMOUFLAGES TO ADVERSARIALLY ATTACK DETECTORS IN THE WILD International Conference on Learning Representations (ICLR), 2019

- PDF -

# **Yang Zhang** Philip David **Boqing Gong**

CURRICULUM DOMAIN ADAPTATION FOR SEMANTIC SEGMENTATION OF URBAN SCENES International Conference on Computer Vision (ICCV), 2017 - PDF , Code -

# **Yang Zhang**

**Boqing Gong** Mubarak Shah

#### FAST ZERO-SHOT IMAGE TAGGING

IEEE Conference on Computer Vision and Pattern Recognition (CVPR), 2016 - PDF , Supp , Code , Video -

Yang Zhang Rupam Acharyya Ji Liu Boqing Gong

Infinite-Label Learning with Semantic Output Codes

ArXiv preprint arXiv:1608.06608 (2016)

- PDF -

Zhezhi He **Yang Zhang** Shaahin Angizi Boqing Gong Deliang Fan

EXPLORING A SOT-MRAM BASED IN-MEMORY COMPUTING FOR DATA PROCESSING IEEE Transactions on Multi-Scale Computing Systems

- PDF -

# SCHOLARSHIPS AND AWARDS

SEPT. 2012 China Mobile Scholarship

SEPT. 2012 CQUPT Innovation and Technology Scholarships SEPT. 2011 CQUPT Innovation and Technology Scholarships

# ACADEMIC SERVICE

Reviewer 2019 International Conference on Computer Vision and Pattern Recognition

2018 IEEE WINTER CONF. ON APPLICATIONS OF COMPUTER VISION

2018 TRANSFERRING AND ADAPTING SOURCE KNOWLEDGE IN COMPUTER VISION WORKSHOP

2018 IEEE INTERNATIONAL CONFERENCE ON BIG DATA

PATTERN RECOGNITION NEUROCOMPUTING

**IEEE TRANSACTIONS ON MULTIMEDIA** 

# **TALK**

OCT. 2015 IDENTITY ASSURANCE USING BIOMETRICS FOR CYBERSECURITY

Florida Center for Cybersecurity 2015 Annual Conference

# **SKILLS**

Deep learning: Theano; Tensorflow; Keras; Pytorch.

Programming: Python; MATLAB; C.

Other: Distributed computing (DoD HPC & UCF cluster); Large dataset learning (100M images).