

TING-HSUAN CHAO (JOEL)

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RESEARCH INTERESTS

- Computer Vision: Scalable Object Detection, Large Scale Image Classification
- Machine Learning: Convolutional Neural Network Compression, Siamese Network Learning

EDUCATION

National Taiwan University M.S. in Computer Science & Information Engineering Communications and Multimedia Laboratory (CMLAB), MiRA Group Advisor: Winston H. Hsu	<i>Sep. 2013 - Jul. 2015</i>
National Taiwan University B.S. in Electrical Engineering	<i>Sep. 2009 - Jul. 2013</i>
National Taichung First Senior High School High Scope Physics Program	<i>Sep. 2006 - Jul. 2009</i>

EXPERIENCE

OpenHCI - The 6th Student Organized Workshop on HCI <i>Web Service</i> Webpage design & maintain Registration system development Network infrastructure construction	<i>Sep. 2013 - Jul. 2015</i>
National Taiwan University <i>Teaching Assistant</i>	<i>Sep. 2013 - Jun. 2014</i>
Hewlett-Packard, Inc <i>Software Engineer</i> Wireless Diagnose Tool Development Softpaq Checking Tool Development	<i>Jul. 2012 - Jun. 2013</i>

PUBLICATIONS

- Chao, Ting-Hsuan, and Lin, Yen-Liang and Kuo, Yin-Hsi and Hsu, Winston H "Scalable Object Detection by Filter Compression with Regularized Sparse Coding." Proceedings of the IEEE Conference on Computer Vision and Pattern Recognition. 2015. (Full paper)
- Chen, Yu-Hsiu, and Chao, Ting-Hsuan, and Lin, Yen-Liang and Hsu, Winston H "Filter-Invariant Image Classification on Social Media Photos" Proceedings of the 23th ACM international conference on Multimedia. ACM, 2015. (Short paper)

PROJECTS

Kaggle - National Data Science Bowl

Dec. 2014 - Mar. 2015

Machine Learning algorithm development

Learn to recognize plankton by training convolutional neural networks. Rank 51th (4.9%) in competition.

Flora

Jul. 2013 - Jun. 2014

Android App core development

A mobile application able to automatically recognize breed of any flowers.

National Taiwan University Hosipital - Swallowing Analysis

Oct. 2013 - Jan. 2014

MATLAB application development

Analyze swallowing function of patients by tracking bone in X-ray photos.

ScoreMaster

Oct. 2013 - May 2014

Android App development

An online Q&A platform for junior/senior high school students. Teachers can answer question and earn money on it.

Space Motion

Mar. 2012 - Sep. 2012

Verilog programming on Altera DE2

Award for Excellent in InnovateAsia Design Contest 2012. It is a new touchpad system designed to have 3 degrees of freedom based on FPGA system.

Happy FACTory

Apr. 2011 - Jun. 2011

Installation art

First Place in National Taiwan University Art Festival installation art competition. Exhibited in Liberal Education Classroom Building in 2011 Spring.

TECHNICAL STRENGTHS

- Computer Languages: C++, Python, JAVA, MATLAB, javascript, HTML, php, Verilog
- Platform Development: Android, node.js, MFC, Altera DE2, ShiVa3D