# Yu-Chuan Su

http://sammy-su.github.io ycsu@cs.utexas.edu

#### RESEARCH INTERESTS

- Computer Vision semantic understanding, low-cost recognition, active vision
- Machine Learning scalable learning algorithms, multimodal deep learning
- Data Mining user intention understanding

#### **EDUCATION**

## University of Texas at Austin

Ph.D. in Computer Science

· Advisor: Prof. Kristen Grauman

• GPA (0 $\sim$ 4 scale): 3.88

## **National Taiwan University**

Master in Computer Science

· Thesis: Large Scale Mobile Visual Recognition

· Advisor: Prof. Winston H. Hsu

• GPA (0 $\sim$ 4.3 scale): 4.27

## National Taiwan University

B.S. in Computer Science and Physics

• GPA (0 $\sim$ 100 scale): 91.11

September 2006 - June 2011

September 2012 - June 2014

August 2014 - Present

#### AWARDS AND FELLOWSHIPS

## ACCV 2016 Best Application Paper Award

· Songde Ma Best Application Paper Award of The 13th Asian Conference on Computer Vision

## IPPR 2015 Best Thesis Award

· Best Master Thesis Award of Chinese Image Processing and Pattern Recognition Society 2015

#### Calhoun Graduate Excellence Fellowship

· Doctoral fellowship from UT Austin (2014-2016)

#### **KDD Cup 2013**

- · Author-Paper Identification Challenge (Track 1) 1st place (in 561 teams)
- · Author Disambiguation Challenge (Track 2) 1st place (in 241 teams)

## College Student Research Training Fellowship

· Fellowship for B.S. research from National Science Council

## National Taiwan University

- · President's Award 4 times (top 5% academic performance in semester)
- · Dean's Award (top 10% academic performance at graduation)

#### SELECTED PUBLICATIONS

• <u>Yu-Chuan Su</u>, Dinesh Jayaraman, Kristen Grauman

Pano2Vid: Automatic Cinematography for Watching 360° Videos

Asian Conference on Computer Vision 2016 (Oral, accept rate 5%)

• Yu-Chuan Su, Kristen Grauman

Detecting Engagement in Egocentric Video

European Conference on Computer Vision 2016 (Oral, accept rate 1.8%)

• Yu-Chuan Su, Kristen Grauman

Leaving Some Stones Unturned: Dynamic Feature Prioritization for Activity Detection in Streaming Video

European Conference on Computer Vision 2016 (Accept rate 26.6%)

• <u>Yu-Chuan Su</u>, Tzu-Hsuan Chiu, Chun-Yen Yeh, Hsin-Fu Huang, Winston H. Hsu Transfer Learning for Video Recognition with Scarce Training Data for Deep Convolutional Neural Network

arXiv:1409.4127v2

• <u>Yu-Chuan Su</u>, Tzu-Hsuan Chiu, Yin-Hsi Kuo, Chun-Yen Yeh, Winston H. Hsu Scalable Mobile Visual Classification by Kernel Preserving Projection over High-Dimensional Features

IEEE Transactions on Multimedia 2014

• <u>Yu-Chuan Su</u>, Tzu-Hsuan Chiu, Yan-Ying Chen, Chun-Yen Yeh, Winston H. Hsu Enabling Low Bitrate Mobile Visual Recognition – A Performance versus Bandwidth Evaluation

ACM Multimedia 2013 (Oral, accept rate 20%)

- <u>Yu-Chuan Su</u>, Tzu-Hsuan Chiu, Guan-Long Wu, Chun-Yen Yeh, Felix Wu, Winston H. Hsu *Flickr-tag Prediction using Multi-modal Fusion and Meta Information* ACM Multimedia 2013 (Grand Challenge)
- Chen-Wei Tsai, <u>Yu-Chuan Su</u>, Guan-De Li, Jeng-Da Chai
   Assessment of Density Functionals with Correct Asymptotic Behavior
   Physical Chemistry Chemical Physics 2013
- Yu-Chuan Su, Guan-Long Wu, Tzu-Hsuan Chiu, Winston H. Hsu Evaluating Gaussian Like Image Representation Over Local Features International Conference on Multimedia and Expo 2012 (Accept rate 30%)
- Guan-Long Wu, Yu-Chuan Su, Tzu-Hsuan Chiu, Winston H. Hsu

  Scalable Mobile Video Question-Answering System with Locally Aggregated Descriptors and Random Projection

ACM Multimedia 2011 (Grand Challenge)

#### RESEARCH EXPERIENCE

#### With Prof. Kristen Grauman

August 2014 - Present

Graduate Research Assistant

Computer Science Department, UT Austin

- · Research in computer vision and machine learning
- · Attention analysis in ego-centric video
- · Feature triage in streaming activity detection
- · Virtual camera control in 360° videos

#### With Prof. Winston H. Hsu

Master Student

July 2012 - June 2014 Computer Science Department, NTU

- · Research in multimedia analysis and machine learning
- · Mobile-friendly visual recognition
- · Deep learning for video event detection using transfer learning

## With Prof. Winston H. Hsu

July 2010 - August 2011

Computer Science Department, NTU

Undergraduate Researcher

· Research in multimedia analysis and retrieval

- · Video question answering and event detection on mobile devices
- · Investigate the properties of gaussian like image representations

## With Prof. Jeng-Da Chai

Undergraduate Researcher

August 2009 - August 2011 Physics Department, NTU

- · Research in Density Functional Theory and Time Dependent Density Functional Theory
- $\cdot$  Develop new long-range corrected functionals using laplacian correction
- $\cdot$  Study the properties of different long-range correction schemes
- · Implement LB94 model potential on Q-Chem 4.0

## WORK EXPERIENCE

Technical Intern

Yahoo!

July 2013 - August 2013

Yahoo! Taiwan

· Work on Yahoo! knowledge graph project with Yahoo! search team