

# Yu-Chuan Su

<http://sammy-su.github.io>

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## RESEARCH INTERESTS

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

## EDUCATION

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### University of Texas at Austin

August 2014 - Present

*Ph.D. in Computer Science*

- Advisor: Prof. Kristen Grauman
- GPA (0~4 scale): 3.88

### National Taiwan University

September 2012 - June 2014

*Master in Computer Science*

- Thesis: Large Scale Mobile Visual Recognition
- Advisor: Prof. Winston H. Hsu
- GPA (0~4.3 scale): 4.27

### National Taiwan University

September 2006 - June 2011

*B.S. in Computer Science and Physics*

- GPA (0~100 scale): 91.11

## AWARDS AND FELLOWSHIPS

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### 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

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- Yu-Chuan Su, Kristen Grauman  
*Making 360° Video Watchable in 2D: Learning Videography for Click Free Viewing*  
Conference on Computer Vision and Pattern Recognition 2017 (Spotlight)
- Yu-Chuan Su, 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%)
- Yu-Chuan Su, 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
- Yu-Chuan Su, 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
- Yu-Chuan Su, 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%)
- Yu-Chuan Su, Tzu-Hsuan Chiu, Guan-Long Wu, Chun-Yen Yeh, Felix Wu, Winston H. Hsu  
*Flicker-tag Prediction using Multi-modal Fusion and Meta Information*  
ACM Multimedia 2013 (Grand Challenge)
- Chen-Wei Tsai, Yu-Chuan Su, 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

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**With Prof. Kristen Grauman**

*Graduate Research Assistant*

August 2014 - Present

*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**

*Undergraduate Researcher*

July 2010 - August 2011

*Computer Science Department, NTU*

- 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
- Develop new long-range corrected functionals using laplacian correction
- Study the properties of different long-range correction schemes
- Implement LB94 model potential on Q-Chem 4.0

## PROFESSIONAL ACTIVITIES

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### Journal Reviewer

- Data Mining and Knowledge Discovery (DAMI)
- IEEE Transactions on Multimedia (TMM)

### Invited Talk

- Academia Sinica  
Vision and Learning Meet-Up: Recent Advances and Experience Sharing from Overseas Taiwanese Scholars, January 2017

## WORK EXPERIENCE

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### Yahoo!

*Technical Intern*

July 2013 - August 2013

*Yahoo! Taiwan*

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