Yu-Chuan Su

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RESEARCH INTEREST

- Computer Vision – visual content analysis, low-cost visual recognition
- Machine Learning – scalable learning algorithm, deep learning
- Data Mining – social media analysis, user intention understanding

EDUCATION

University of Texas at Austin August 2014 - Present
Ph.D. in Computer Science

· Advisor: Prof. Kristen Grauman

National Taiwan University September 2012 - June 2014
Master in Computer Science

· Thesis: Large Scale Mobile Visual Recognition
· Advisor: Prof. Winston H. Hsu
· Committee: Prof. Wen-Chin Chen, Dr. Tyng-Luh Liu, Prof. Chih-Jen Lin

National Taiwan University September 2006 - June 2011
B.S. in Computer Science and Physics

· GPA (0∼100 scale): 91.11
· Total Credits: 242

AWARD AND FELLOWSHIP

Calhoun Fellowship

· Graduate fellowship for Ph.D. study from UT Austin

IPPR Best Thesis Award

· Best Master Thesis Award of IPPR 2015

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)

PUBLICATION

- Yu-Chuan Su, Tzu-Hsuan Chiu, Chun-Yen Yeh, Hsin-Fu Huang, Winston H. Hsu (arXiv:1409.4127v2)
  Transfer Learning for Video Recognition with Scarce Training Data for Deep Convolutional Neural Network
- Chun-Yen Yeh, Yu-Ming Hsu, Hsin-Fu Huang, Hong-Wun Jheng, Yu-Chuan Su, Tzu-Hsuan Chiu, Winston H. Hsu (WWW 2014)
  Me-link: Link me to the media fusing audio and visual cues for robust and efficient mobile media interaction
- Yu-Chuan Su, Tzu-Hsuan Chiu, Yin-Hsi Kuo, Chun-Yen Yeh, Winston H. Hsu (IEEE Transactions on Multimedia 2014)
  Scalable Mobile Visual Classification by Kernel Preserving Projection over High-Dimensional Features
- Yu-Chuan Su, Tzu-Hsuan Chiu, Yan-Ying Chen, Chun-Yen Yeh, Winston H. Hsu (ACM MM 2013; Full Paper)
  Enabling Low Bitrate Mobile Visual Recognition – A Performance versus Bandwidth Evaluation
- Yu-Chuan Su, Tzu-Hsuan Chiu, Guan-Long Wu, Chun-Yen Yeh, Felix Wu, Winston H. Hsu (ACM MM 2013; Grand Challenge)
  Flickr-tag Prediction using Multi-modal Fusion and Meta Information
- Chen-Wei Tsai, Yu-Chuan Su, Guan-De Li, Jeng-Da Chai (Phys. Chem. Chem. Phys., 2013)
  Assessment of Density Functionals with Correct Asymptotic Behavior
- Tzu-Hsuan Chiu, Guan-Long Wu, Yu-Chuan Su, Winston H. Hsu (MMSP 2012)
  Sharing the Trees among Random Forests for Effective and Efficient Concept Detection
- Yu-Chuan Su, Guan-Long Wu, Tzu-Hsuan Chiu, Winston H. Hsu (ICME 2012)
  Evaluating Gaussian Like Image Representation Over Local Features
- Guan-Long Wu, Yu-Chuan Su, Tzu-Hsuan Chiu, Winston H. Hsu (ACM MM 2011; Grand Challenge)
  Scalable Mobile Video Question-Answering System with Locally Aggregated Descriptors and Random Projection

RESEARCH EXPERIENCE

With Prof. Kristen Grauman — August 2014 - Present
Graduate Research Asssistant — *Computer Science Department, UT Austin*

· Research in computer vision and machine learning
· Attention analysis in ego-centeric video

With Prof. Winston H. Hsu — July 2012 - June 2014
Master Student — *Computer Science Department, NTU*

· Research in multimedia analysis and machine learning
· Mobile-friendly image classification
· Scalable machine learning algorithm on multimedia data
· Deep learning for video event detection using transfer learning

With Prof. Winston H. Hsu — July 2010 - August 2011
Undergraduate Researcher — *Computer Science Department, NTU*

· Research in multimedia analysis and retrieval

· Medical Image Analysis
· Video event detection on mobile by near duplicate video retrieval
· Question answering by near duplicate video retrieval
· Investigate the properties and differences of gaussian like image representations

With Prof. Jeng-Da Chai August 2009 - August 2011
Undergraduate Researcher *Physics Department, NTU*

· Research in Density Functional Theory and Time Dependent Density Functional Theory
· Developed new long-range corrected functional using laplacian correction
· Evaluated the properties of different long-range correction schemes
· Collect a new dataset for frontier orbital energies
· Implementation of LB94 model potential on Q-Chem 4.0

PROFESSIONAL ACTIVITIES

Journal Reviewer

· Data Mining and Knowledge Discovery (DAMI)

WORK EXPERIENCE

Yahoo! July 2013 - August 2013
Technical Intern

· Intern with Yahoo! search team at Taiwan.
· Work on Yahoo! knowledge graph project.