

# Yang Song

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MK 306, Dept. Electrical Engineering and Computer Science  
University of Tennessee, Knoxville, TN, 37996  
Phone: (865) 789-9216  
Email: ysong18@utk.com

- OBJECTIVE**      **An Intern in image processing, computer vision, and machine learning**
- EDUCATION**      **University of Tennessee, Knoxville, USA**      August 2013 - Present  
Ph.D candidate in Computer Engineering
- Zhejiang University, Hangzhou, China**      Sept 2010 - April 2012  
Master in Electrical Engineering
- Northeastern University, Shenyang, China**      Sept 2006 - July 2010  
Bachelor in Electrical Engineering
- RESEARCH INTEREST**      **Machine learning** with special interests in Dictionary Learning, Sparse Coding, Deep learning, Computer Vision, Image Processing, and Programming.
- PUBLICATIONS** **Yang Song**, Wei Wang, Zhifei Zhang, Hairong Qi, Yilu Liu. “Multiple Event Detection and Recognition for Large-scale Power Systems through Cluster-based Sparse Coding”, *IEEE Transactions on Power Systems*, 2017. (Impact factor: 3.342)
- Zhifei Zhang, **Yang Song**, and Hairong Qi. “Age Progression/Regression by Conditional Adversarial Autoencoder”, *IEEE Conference on Computer Vision and Pattern Recognition (CVPR)*, 2017. (Acceptance rate: 9%)
- Yang Song**, Xie Xie, Jiajia Luo, Peter K. Liaw, Hairong Qi, and Yanfei Gao. “Seeing the Unseen: Uncover the Bulk Heterogeneous Deformation Processes in Metallic Glasses through Surface Temperature Decoding”, *Materials Today*, 2016. (Impact factor: 17.793)
- Yang Song**, Zhifei Zhang, Alireza Rahimpour, and Hairong Qi. “Dictionary Reduction: Beyond Compact Dictionary Learning for Classification”, *Asian Conference on Computer Vision (ACCV)*, 2016. (Acceptance rate: 25%)
- Zhang, Zhifei, **Yang Song**, Haochen Cui, Jayne Wu, Fernando Schwartz, and Hairong Qi. “Topological Analysis and Gaussian Decision Tree: Effective Representation and Classification of Biosignals of Small Sample Size”, *IEEE Transactions on Biomedical Engineering*, 2016. (Impact factor: 2.468)
- Zhifei Zhang, **Yang Song**, Wei Wang, and Hairong Qi. “Derivative Delay Embedding: Online Modeling of Streaming Time Series”, *International Conference on Information and Knowledge Management (CIKM)*, 2016. (Acceptance rate: 17.6%)
- Yang Song**, Wei Wang, Zhifei Zhang, Hairong Qi, Yilu Liu. “Multiple Event Analysis for Large-scale Power Systems Through Cluster-based Sparse Coding”, *IEEE SmartGridComm*, 2015.
- Yang Song**, Xuemei Zhu, Wenjun Huang, “A Vision-based Fault Diagnosis System

for Heliostat in A Central Receiver Solar Power Plant”, *The 10th World Congress on Intelligent Control and Automation (WCICA)*, 2012.

Xiang Chen, Zhifei Zhang, **Yang Song**, “A Real-Time Driving Fatigue Monitoring DSP Device Based On Computing Complexity of Binarized Image”, *The 2009 International Workshop on Computer Science and Engineering (WCSE)*, 2009.

**TECHNOLOGY SKILLS** Programming Languages: Python, MatLab, OpenCV, C, C++, TensorFlow  
Platform: Linux, Windows

**AWARDS HONORS**

- Outstanding Student Scholarship of NEU, 2006
- Outstanding Cadre of NEU, 2007
- NEU Scholarship, 7 times, 2006-2010
- State Undergraduate Innovative Training Program, First Prize, 2008-2009
- The Fifth "Freescale" Cup Smart Car Race, Second Prize, 2009-2010