

Yun Gu

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Education

School of Biomedical Engineering <i>PhD, Biomedical Engineering</i>	Shanghai Jiaotong University 2015–present
School of Electronic Information and Electricity Engineering <i>Master, Pattern Recognition and Intelligent System</i>	Shanghai Jiaotong University 2013–2015
School of Electric and Information Engineering <i>Bachelor, Electrical Engineering</i>	Xi'an Jiaotong University 2009–2013

Research Interests

Image Retrieval; Machine Learning;

Awards/Honors/Scholarships

2015 Postgraduate Academic Excellence Scholarship
2014 Postgraduate Academic Excellence Scholarship
2014 National Postgraduate Mathematical Contest in Modeling (GMCM), First Prize (Top 2%)
2013 Honor of Outstanding Graduate Student of Xi'an Jiaotong University
2013 Best Bachelor Graduation Thesis of Xi'an Jiaotong University (less than 1%)
2012 Meritorious Winner of Mathematical Contest in Modeling (MCM)
2012 Scholarship of Suzhou Industrial Park
2012 Honor of Outstanding Student of Xi'an Jiaotong University
2011 First Prize of Shaanxi Province of China Undergraduate Mathematical Contest in Modeling
2011 Best Paper Award for Summer Camp of Mathematical Modeling of Xi'an Jiaotong University
2011 Siyuan Scholarship
2011 Honor of Outstanding Student of Xi'an Jiaotong University
2010 Golden Gulf Scholarship
2010 Honor of Outstanding Student of Xi'an Jiaotong University

Languages

Mandarin Chinese: Mother Tongue

English: IELTS 7.0 (L:7.0/R:8.0/W:6.0/S:6.0); CET4 605/710; CET6 537/710

Computer skills

Skilled in programming with C/C++/Python and Matlab;
Skilled in Linux;
Experiences with OpenGL, OpenCV and Caffe.

Research Experience

- Research Project.....
- Institute of Image Processing and Pattern Recognition** **SJTU**
Image Retrieval **2013–2015**
Focusing on Image Retrieval for Large-scaled Dataset
- o Image Annotation Exploiting Textual and Visual Saliency;
 - o Cross-modal Hashing with Partial Correspondence.
- Ministry of Education Key Lab of Intelligent Networks & Network Security** **XJTU**
Smart Grid **2012–2013**
Focusing on Smart Grid Security
- o Bad Data Detection Method based on Distributed State Estimation (DSE) in Smart Grid;
 - o Bad Data Identification Method based on Adaptive Partitioning State Estimation (APSE) in Smart Grid;
 - o Cyber-Physical Fusion Method for Attack Detection in Smart Grid.
- Lab of Social Mobile Multimedia Mining Learning and Search** **XJTU**
Image Retrieval **2011 -2013**
Focusing on Image Annotation for Large-scaled Dataset
- o Image Annotation Method based on Latent-Community and Multiple Kernel Learning.

Extracurricular Academic Activity

- International Conference on Communications, IEEE** **Budapest, Hungary**
Oral Presentation **2013**
- Scheduling for Tourists**
Mathematical Contest in Modeling **2012**
Establish an optimal model and a simulation platform for scheduling for white-water floating trips in Grand Canyon
- Scheduling for Urban Security**
China Undergraduate Mathematical Contest in Modeling **2011**
Establish an optimal model against the urban crimes for the police

Publications

- Graduate Thesis.....
1. **Y.Gu**, "The Research on Bad Data Detection and Identification in Smart Grid", Bachelor, *Outstanding Graduate Thesis of Xi'an Jiaotong University*, 2013;
 2. **Y.Gu**, "Multimodal Feature Correlation Analysis for Image Understanding", Master, 2015;
- Conference Paper.....
1. **Y.Gu**, T.Liu, D.Wang, X.Guan and Z.Xu, "Bad Data Detection Method for Smart Grid Based on Distributed State Estimation" *IEEE International Conference on Communications*, 2013 ,p4483-4487;
 2. **Y.Gu**, H.Xue, J.Yang, N.Kasabov and Z.Jia, "Automatic Image Annotation Exploiting Textual and Visual Saliency" *The 21st International Conference on Neural Information Processing (ICONIP)*, 2014;
 3. **Y.Gu**, H.Xue, J.Yang, "Cross Modality Hashing with Partial Correspondence" *IEEE International Conference on Image Processing (ICIP)*, 2015;

4. T.Liu, **Y.Gu**, D.Wang, and X.Guan, "APSE: A Novel Method to Detect Bad Data Injection Attack in Smart Grid" *IEEE INFOCOM Workshop on Communications and Control for Smart Energy Systems*, 2013, p3423-3428;
5. Q.Li, **Y.Gu** and X.Qian "Latent-Community and Multi-Kernel Learning based Image Annotation" *ACM International Conference on Information and Knowledge Management (CIKM)*, 2013 , p1469-1472;
6. Q.Chen, **Y.Gu**, et.al. "Pedestrian Counting with Random Forests". *22nd International Conference on Neural Information Processing (ICONIP)*, 2015.
7. S.Huang, **Y.Gu**, et.al. "Reranking of Person Re-identification by Manifold-based approach". *IEEE International Conference on Image Processing (ICIP)*, 2015.
8. H.Xue, **Y.Gu**, et.al. "RGB-D Saliency Detection via Mutual Guided Manifold Ranking".*IEEE International Conference on Image Processing (ICIP)*, 2015.
9. W.Liu, H.Xue, **Y.Gu**, Q.Wu, J.Yang and N.Kasabov "Shape Preserving RGB-D Depth Map Restoration" *The 21st International Conference on Neural Information Processing (ICONIP)*, 2014;
10. D.Wang, X.Guan, T.Liu, **Y.Gu**, Y. Sun and Y. Liu "A Survey on Bad Data Injection in Smart Grid" *IEEE Asia-Pacific Power and Energy Engineering Conference (APPEEC)*, 2013;
11. Y.Zhao, T. Liu, Y.Liu, Y.Sun and **Y.Gu** "Event-oriented Cyber-Physical Fusion Method for Attack Detection in Smart Grid" *IEEE Innovative Smart Grid Technologies Asia*, 2013 .

Journal Paper.....

1. **Y.Gu**, X.Qian, Q.Li "Image Annotation by Latent Community Detection and Multi-Kernel Learning", *IEEE Transactions on Image Processing*, 2015;
2. **Y.Gu**, H.Xue, J.Yang "Cross-modal Saliency Correlation for Image Annotation", *Neural Processing Letters*, 2016;
3. L.Liu, Q.Li, **Y.Gu**, H.Li and L.Chen "Multi-Objective Optimization Model with Application to Electricity Pricing" *Journal of Xi'an Jiaotong University*, Vol.47, No.10, 2013;
4. D.Wang, X.Guan, T.Liu , **Y.Gu**,et.al , "EDSE: A Detection Method Against Tolerable False Data Injection Attack in Smart Grid", *Energies* 2014, 7(3), 1517-1538;
5. T.Liu, **Y.Gu**, D.Wang, and X.Guan, "APSE: A Novel Detection and Location Method Against Bad Data Injection Attack in Smart Grid based on Adaptive Partitioning State Estimation" (Under Review, submitted to *IEEE Transactions on Smart Grid*).