

# 郭迪 简历

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## 教育背景:

- 2009/10 - 2011/10, 美国 University of Washington, 电子工程系, Visiting Scientist
- 2008/09 - 2012/06, 厦门大学, 通信与信息系统, 工学博士 (提前攻博)
- 2006/09 - 2008/07, 厦门大学, 通信与信息系统, 工学硕士研究生
- 2001/09 - 2005/07, 厦门大学, 通信工程, 工学学士

## 工作经历:

- 2015/07 - 至今, 厦门理工学院, 计算机与信息工程学院, 副教授
- 2012/05 - 2015/07, 厦门理工学院, 计算机与信息工程学院, 讲师
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## 社会兼职:

- IEEE 会员, 中国计算机学会会员

研究方向: 无线传感网, 无线通信, 信号与图像处理

## 讲授课程:

- 无线传感网络
- 通信原理
- 计算机组成原理
- 物联网临就业培训

## 科研项目:

- 国家自然科学基金青年项目“基于拓扑结构的无线传感网多模数据稀疏修复” (61302174), 2014.01-2016.12, 负责人
- 国家自然科学基金青年项目“空间编码可控的快速 MRI 高分辨率图像稀疏重建” (61201045), 2013.01-2015.12, 第 4 位
- 福建省自然科学基金项目“基于 X 线光谱图像的食源性有害物质的快速检测算法研究” (2014J01256), 2014.01-2016.12, 第 3 位

## 教学项目:

- 厦门理工学院 2014-2015 学年网络课程建设项目《计算机组成原理》, 负责人

## 发表论文:

- [1] Di Guo, Jingwen Yan, Xiaobo Qu. “High quality multi-focus image fusion using self-similarity and depth information,” *Optics Communications*, 338: 138–144, 2015. (SCI&EI, JCR3, IF 1.54)
- [2] Di Guo, Xiaobo Qu, Meng Wu, Keshou Wu. “A modified iterative alternating direction minimization algorithm for impulse noise removal in images,” *Journal of Applied Mathematics*, Vol. 2014, Article ID 595782, 12 pages, 2014. (SCI, JCR3, IF 0.83)
- [3] Di Guo, Zicheng Liu, Xiaobo Qu, Lianfen Huang, Yan Yao, Ming-Ting Sun. “Sparsity-based Online Missing Data Recovery Using Overcomplete Dictionary,” *IEEE Sensors Journal*, vol.12, no.7,

pp.2485-2495, 2012. (SCI&EI, JCR3, IF 1.47)

[4] **Di Guo**, Xiaobo Qu, Lianfen Huang, Yan Yao. "Optimized local superposition in wireless sensor networks with t-average-mutual-coherence," *Progress in Electromagnetics Research*, 122, pp. 389-411, 2012. (SCI&EI, JCR2, IF 3.76)

[5] **Di Guo**, Xiaobo Qu, Lianfen Huang, Yan Yao. "Sparsity-based spatial interpolation in wireless sensor networks," *Sensors*, vol. 11, no. 3, pp. 2385-2407, 2011. (SCI, JCR2, IF 1.77)

[6] **Di Guo**, Xiaobo Qu, Xiaofeng Du, Keshou Wu, and Xuhui Chen. "Salt and Pepper noise removal with noise detection and a patch-based sparse representation," *Advances in Multimedia*, vol. 2014, Article ID 682747, 14 pages, 2014. (EI)

[7] **Di Guo**, Xiaobo Qu, Lianfen Huang, Yan Yao, Zicheng Liu, Ming-Ting Sun. "Sparsity-based online missing sensor data recovery," *2012 IEEE Int. Symp. Circuits and Systems*, May 20, 2012. (Oral presentation, win student grant KRW550,000)

[8] **Di Guo**, Xiaobo Qu, Mingbo Xiao, Yan Yao. "Comparative analysis on transform and reconstruction of compressed sensing in sensor networks," in *Int. Conf. Commun. and Mobile Computing*, Jan. 6-8 2009, Kunming, China, pp.441-445. (EI)

[9] Xiaobo Qu, **Di Guo**, Bende Ning, Shuhui Cai, Zhong Chen. "Undersampled MRI reconstruction with patch-based directional wavelets," *Magnetic Resonance Imaging*, 30(7):964-977, 2012. (SCI, JCR4, IF 2.21)

[10] Xiaobo Qu, **Di Guo**, Xue Cao, Shuhui Cai and Zhong Chen. "Reconstruction of self-sparse 2D NMR spectra from undersampled data in indirect dimension," *Sensors*, vol. 11, no. 9, pp. 8888-8909, 2011. (SCI, JCR2, IF 1.77)

[11] Lei Liu, Jingwen Yan, **Di Guo**, Yunsong Liu, Xiaobo Qu\*. Undersampled hyperspectral image reconstruction based on surfacelet transform, *Journal of Sensors*, DOI:10.1155/2014/256391, 2014. (SCI)

[12] Bende Ning, Xiaobo Qu\*, **Di Guo**, Changwei Hu, Zhong Chen\*. "Magnetic resonance image reconstruction using trained geometric directions in 2D redundant wavelets domain and non-convex optimization," *Magnetic Resonance Imaging*, 31(9):1611-1622, 2013. (SCI, JCR4, IF 2.06)

[13] Changwei Hu, Xiaobo Qu, **Di Guo**, Lijun Bao, Zhong Chen. "Wavelet-based edge correlation incorporated iterative reconstruction for undersampled MRI," *Magnetic Resonance Imaging*, vol.29, no.7, pp. 907-915, 2011. (SCI, JCR4, IF 2.21)

[14] Xiaobo Qu, Xue Cao, **Di Guo**, Changwei Hu and Zhong Chen. "Combined sparsifying transforms for compressed sensing MRI," *Electronics Letters*, vol.46, no.2, pp.121-123, 2010. (SCI&EI, JCR3, IF 1.07)

[15] Xiaobo Qu, Weiru Zhang, **Di Guo**, Congbo Cai, Shuhui Cai, Zhong Chen. "Iterative thresholding compressed sensing MRI based on contourlet transform," *Inverse Problems in Science and Engineering*, vol.18, no.6, pp.737-758, 2010. (SCI&EI, JCR4, IF 0.69)

[16] Xiaobo Qu\*, Lei Li, **Di Guo**. Multi-focus image fusion with structure-driven adaptive regions, The 6th International Conference on Internet Multimedia Computing and Service-ICIMCS'14, pp. 86-89, Xiamen, China, 10th -12th, July, 2014. (EI)

[17] Xiaobo Qu, Yingkun Hou, Fan Lam, **Di Guo**, Jianhui Zhong, Zhong Chen. "Magnetic resonance image reconstruction from undersampled measurements using a patch-based nonlocal operator," *Medical Image Analysis*, vol. 18, no. 6, pp. 843-856, 2014. (SCI&EI, JCR1, 3-Year IF 4.09)

[18] Qiyue Li, Xiaobo Qu, Yunsong Liu, **Di Guo**, Zongying Lai, Jing Ye, Zhong Chen. "Accelerating patch-based directional wavelets with multicore parallel computing in compressed sensing MRI,"

*Magnetic Resonance Imaging*, DOI: 10.1016/j.mri.2015.01.014, **in press**, 2015. (SCI, JCR4, IF 2.06)

[19] Yunsong Liu, Jian-feng Cai, Zhifang Zhan, **Di Guo**, Jing Ye, Zhong Chen, Xiaobo Qu\*. Balanced sparse model for tight frames in compressed sensing magnetic resonance imaging, *PLoS ONE*, 10(4): e0119584, 2015. (SCI, JCR 2, IF 3.53)

[20] Zongying Lai, Xiaobo Qu\*, Yunsong Liu, **Di Guo**, Jing Ye, Zhifang Zhan, Zhong Chen\*. Image reconstruction of compressed sensing MRI using graph-based redundant wavelet transform, *Medical Image Analysis*, accepted, 2015. (SCI&EI, JCR1, 3-Year IF 4.09)

[21] Qiyue Li, Xiaobo Qu\*, Yunsong Liu, **Di Guo**, Jing Ye, Zhifang Zhan, Zhong Chen\*. "Parallel computing of patch-based nonlocal operator and its application in compressed sensing MRI," *Computational and Mathematical Methods in Medicine*, vol. 2014, Article ID 257435, 6 pages, 2014. doi:10.1155/2014/257435. (SCI, IF 0.791)

[22] Xiaobo Qu, Yingkun Hou, Fan Lam, **Di Guo**, Zhong Chen. "Magnetic resonance image reconstruction using similarities learnt from multi-modal images," *1st IEEE China Summit & International Conference on Signal and Information Processing-ChinaSIP'13*, 6th – 10th, July, 2013, pp.264-268.(EI)

[23] Lei Liu, Jingwen Yan, Xianwei Zheng, Hong Peng, **Di Guo**, Xiaobo Qu\*. Karhunen-Loève transform for compressive sampling in hyperspectral imaging, *Optical Engineering*, 54(1), 014106 (Jan 14, 2015). doi: 10.1117/1.OE.54.1.014106. (SCI&EI, JCR 4, 2013 IF 0.96)

[24] **郭迪**, 王琨, 屈小波.基于 Clark-Wright 算法的邮路规划和邮车调度.福建电脑,2008,2: 90-91.

[25] 章书勤,**郭迪**,肖明波.无线传感器网络数据传输及融合技术,现代电子技术,2009,305(18): 188-191.

#### 发明专利:

- [1] 屈小波, 颜志煜, 陈颖, 庄孝星, **郭迪**, 陈忠. 一种射频脉冲控制的压缩感知磁共振成像方法, 中国发明专利, 授权号: ZL201210534894.3, 申请日: 2012年12月12日, 授权日: 2015年1月21日.
- [2] 屈小波, 沈前进, 李淇越, **郭迪**, 陈忠. 面向医学图像的多线程并行计算方法, 中国发明专利, 公开号: CN103631568A, 2013.
- [3] 李桂森, 陈旭辉, 吴克寿, 胡建强, 谢荣生, **郭迪**, 洪朝群, 崔建峰, 陈仁, 温玄. 一种基于方向的城市车载自组织网络广播方法, 中国发明专利, 公开号: CN103347251A, 2013.
- [4] 屈小波, 占志芳, 刘运松, **郭迪**, 陈忠. 一种磁共振图像的迭代重建方法, 2015年4月, 中国发明专利, 申请号: 2015101810180.0.
- [5] 屈小波, 应佳熙, **郭迪**, 陈忠. 一种高维核磁共振时域信号补全方法, 2015年5月, 中国发明专利, 申请号: 201510235929.7.

#### 相关获奖

- 第25届IEEE电路与系统年会(ISCAS 2012)学生资助奖, 2012.05
- IBM中国优秀学生奖学金, 2012.12
- 第四届全国研究生数学建模竞赛三等奖, 2007.12
- 厦门市留学人员, 2012.10
- 厦门大学2011年度研究生科研成果奖三等奖, 2012.05
- 第四届京信杯《无线改变生活》应用方案设计大奖赛二等奖, 2009.06