

Curriculum Vitae

Guo, Quan

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I am Quan Guo, Ph.D., currently working as a Postdoctoral Fellow at Tulane University, USA. I received my Ph.D. degree in machine intelligence from Sichuan University in 2017, supervised by Professor Zhang Yi, IEEE fellow. I also received my master's degree and bachelor's degree from Sichuan University in 2013 and 2010 respectively.

Contact Info

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Education

2013 – 2017	Sichuan University, <i>Ph.D.</i>
2010 - 2013	Sichuan University, <i>M.S.</i>
2006 - 2010	Sichuan University, <i>B.Eng.</i>

Professional Experience

2019	Postdoctoral Fellow, Tulane University, USA
2018	Research Assistant, Sichuan University, China
2014	<i>R&D Internship</i> , Institute of Deep Learning (IDL), Baidu Inc, China
2013	<i>Visiting PhD. Student</i> , Tsinghua University, China

Professional Services

Organizations

- ♦ Chair, IEEE Chengdu Young Professional Affinity Group (2016~)

Journal Reviewer

- ♦ IEEE Transactions on Neural Networks and Learning Systems (TNNLS)

- ♦ IEEE Transactions on Knowledge and Data Engineering (TKDE)
- ♦ IEEE Transactions on Cybernetics (TCyb)
- ♦ Knowledge-Based Systems
- ♦ Neurocomputing
- ♦ Frontiers of Computer Science
- ♦ Acta Automatica Sinica
- ♦ Applied Computational Intelligence and Soft Computing

Conference Reviewer

- ♦ International Joint Conference on Neural Networks (IJCNN 2014, 2015, 2016, 2017)
- ♦ 2015 National Conference of Theoretical Computer Science (NCTCS 2015) Jinhua, China, Oct. 30 - Nov. 1, 2015
- ♦ 2016 International Conference on Frontier of Computer Science and Technology (FCST 2016), Nagasaki, Japan, Nov. 11, 2016

Conference Organization

- ♦ Session Chair, 2016 International Conference on Frontier of Computer Science and Technology (FCST 2016), Nagasaki, Japan, Nov. 11, 2016
- ♦ Program Committee Member, 2016 International Conference on Frontier of Computer Science and Technology (FCST 2016), Nagasaki, Japan, Nov. 11, 2016

Honors and Awards

2017 ACM Chengdu Best Ph.D. Thesis Award Nomination
 2016 IEEE Chengdu Section 2016 Excellent Student Paper Award
 2016 SCF 2016 Best Student Paper Award
 National Scholarship (for 2009, 2013, 2015, and 2016)
 2012 The First Prize Scholarship of Sichuan University for Postgraduates
 2009 The First Prize Scholarship of Sichuan University
 2008 The IBM Chinese Excellent Student Scholarship
 2008 The Wisisoft Scholarship
 2009 Double TopTen Classes in Sichuan University (as the class monitor)
 2008 Top Ten Student Unions in Sichuan University (as the vice-president of the Student Union)

Code Bases

DSD (data science docker): <https://github.com/guoquan/dsd> | python, shell | A flexible management environment for experiments based on docker
 dlexp: <https://github.com/guoquan/dlexp> | MATLAB | Scaffold codes for feedforward neural network and autoencoders
 dlexp2: <https://github.com/guoquan/dlexp2> | MATLAB | A framework for more flexible structure of neural networks with auto-differentiation.

fixed-point: In-company library of Baidu Inc. | C++, shell | A set of utilities to turn a trained network and its parameters into uint8 network.

Publications

2018

- [1] X. Xu, **Quan Guo**, J. Guo, and Z. Yi, "DeepCXray: Automatically Diagnosing Diseases on Chest X-Rays Using Deep Neural Networks," *IEEE Access*, no. 6, pp. 66972–66983, 2018.
- [2] J. Wang, L. Zhang, **Quan Guo**, and Z. Yi, "Recurrent Neural Networks with Auxiliary Memory Unit," *IEEE Transactions on Neural Networks and Learning Systems*, vol. 29, no. 5, pp. 1652–1661, 2018.

2017

- [3] **Q. Guo**, H. Zhang, and Z. Yi, "High-Order Measurements for Residual Classifiers," *IEEE Transactions on Neural Networks and Learning Systems*, vol. 28, iss. 5, pp. 1030-1042, 2017.
- [4] Z. Yi, **Q. Guo**, and J. Wang, "Big data analysis using neural networks," *Advanced Engineering Sciences*, vol. 49, iss. 1, pp. 9-18, 2017.
- [5] K. Li, **Q. Guo**, and J. Guo, "Novel Algorithms for Reducing Bladder Volume Estimation Error Caused by Scanning Positions," *International Journal of Computer Mathematics*, vol. 94, iss. 6, pp. 1138-1154, 2017. doi:10.1080/00207160.2016.1184260
- [6] J. Wang, L. Zhang, **Q. Guo**, and Z. Yi, "Recurrent Neural Networks with Auxiliary Memory Unit," *IEEE Transactions on Neural Networks and Learning Systems*, Online Early Access, 2017. doi:10.1109/TNNLS.2017.2677968

2016

- [7] **Q. Guo**, J. Jia, G. Shen, L. Zhang, L. Cai, and Z. Yi, "Learning Robust Uniform Features for Cross-media Social Data by Using Cross Autoencoders," *Knowledge-Based Systems*, vol. 102, pp. 64-75, 2016. doi:10.1016/j.knosys.2016.03.028
- [8] Y. Sun, H. Mao, **Q. Guo**, and Z. Yi, "Learning a good representation with unsymmetrical auto-encoder," *Neural Computing and Applications*, vol. 27, iss. 5, pp. 1361–1367, 2016. doi:10.1007/s00521-015-1939-3
- [9] **Q. Guo**, J. Wang, Y. Chen, and Z. Yi, "Chinese Songci Composing with Recurrent Neural Network," *2016 International Conference on Frontier of Computer Science and Technology (FCST 2016)*, Nagasaki, Japan, Nov. 11, 2016.

2014

- [10] 章毅, **郭泉**, 张蕾, and 吕建成, "深度网络和认知计算," *中国计算机学会通讯(CCCF)*, vol. 10, iss. 2, pp. 26-32, 2014.
- [11] H. Lin, J. Jia, **Q. Guo**, Y. Xue, Q. Li, J. Huang, L. Cai, and L. Feng, "User-level psychological stress detection from social media using deep neural network," in *Proceedings of the ACM international conference on multimedia (ACMMM 2014)*, New York, NY, USA, 2014, pp. 507-516. doi:10.1145/2647868.2654945

- [12] Z. Ren, J. Jia, **Q. Guo**, K. Zhang, and L. Cai, "Acoustics, content and geo-information based sentiment prediction from large-scale networked voice data," *in Multimedia and expo (ICME 2014), 2014 IEEE international conference on*, 2014. doi: 10.1109/ICME.2014.6890151
- [13] H. Lin, J. Jia, **Q. Guo**, Y. Xue, J. Huang, L. Cai, and L. Feng, "Psychological stress detection from cross-media microblog data using deep sparse neural network," *in Multimedia and expo (ICME 2014), 2014 IEEE international conference on*, 2014. doi: 10.1109/ICME.2014.6890213

2013

- [14] **Q. Guo**, L. Zhang, S. Wang, and Z. Yi, "Rigid image registration via column sparse optimisation for seal registration," *Electronics letters*, vol. 49, iss. 17, pp. 1069-1071, 2013. doi:10.1049/el.2013.0835