# Curriculum Vitae

# Guo, Quan

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I am Quan Guo, Ph.D., Postdoc Fellow at Tulane University, USA, where I am working with Professor Parisa Kordjamshidi. 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, M.S.
2006 - 2010	Sichuan University, B.Eng.

# **Professional Experience**

2019	Postdoctoral Fellow, Tulane University, USA
2018	Research Assistant, Sichuan University, China
2014	R&D Internship, Institute of Deep Learning (IDL), Baidu Inc, China
2013	Visiting PhD. Student, 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 Wisesoft 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): <a href="https://github.com/guoquan/dsd">https://github.com/guoquan/dsd</a> | python, shell | A flexible management environment for experiments based on docker
- dlexp: <a href="https://github.com/guoquan/dlexp">https://github.com/guoquan/dlexp</a> | MATLAB | Scaffold codes for feedforward neural network and autoencoders
- dlexp2: <a href="https://github.com/guoquan/dlexp2">https://github.com/guoquan/dlexp2</a> | 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 autoencoder," *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