

## EDUCATION

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<b>Southeast University (SEU)</b> Ph.D. in Instrumental science and technology	Nanjing, China 2007–2011
<b>Shenyang Institute of Automation, Chinese Academy of Sciences (CAS)</b> M.S. in Pattern Recognition and Intelligent Systems	Shenyang, China 2002–2004
<b>University of Science and Technology of China (USTC)</b> Basic theory studies for the Master's degree in Automation	Hefei, China 2001–2002
<b>Zhengzhou University (ZZU)</b> B.S. in Computer Science	Zhengzhou, China 1997–2001

## EMPLOYMENT

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<b>Nanjing Normal University (NNU)</b> Associate Professor at School of Electrical Engineering and Automation	Nanjing, China 2014–current
<b>Northumbria University (NU)</b> Visiting Scholar at Department of Mechanical Engineering	Newcastle, UK 2016–2017
<b>University of California, Los Angeles (UCLA)</b> Research Fellow at Institute for Pure and Applied Mathematics	Los Angeles, USA 2008–2009
<b>China Jiliang University (CJLU)</b> Associate Professor at School of Information Engineering	Hangzhou, China 2004–2014

## TEACHING

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- **Teacher** at Nanjing Normal University  
*Data Structures and Algorithms (C language)* Autumn Semester
- **Teacher** at Nanjing Normal University  
*Digital Image Processing* Spring Semester

## PUBLICATIONS

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- [1] W. Gao, L. Zhang, W. Huang, F. Min, J. He, and A. Song, “Deep neural networks for sensor-based human activity recognition using selective kernel convolution”, *IEEE Transactions on Instrumentation and Measurement*, vol. 70, pp. 1–13, 2021.
- [2] W. Gao, L. Zhang, Q. Teng, J. He, and H. Wu, “Danhar: Dual attention network for multimodal human activity recognition using wearable sensors”, *Applied Soft Computing*, vol. 111, p. 107728, 2021.
- [3] W. Huang, L. Zhang, W. Gao, F. Min, and J. He, “Shallow convolutional neural networks for human activity recognition using wearable sensors”, *IEEE Transactions on Instrumentation and Measurement*, vol. 70, pp. 1–11, 2021.

- [4] W. Huang, L. Zhang, Q. Teng, C. Song, and J. He, "The convolutional neural networks training with channel-selectivity for human activity recognition based on sensors", *IEEE Journal of Biomedical and Health Informatics*, vol. 25, no. 10, pp. 3834–3843, 2021.
- [5] T. Liu, S. Wang, Y. Liu, W. Quan, and L. Zhang, "A lightweight neural network framework using linear grouped convolution for human activity recognition on mobile devices", *The Journal of Supercomputing*, pp. 1–21, 2021.
- [6] Q. Teng, L. Zhang, Y. Tang, S. Song, X. Wang, and J. He, "Block-wise training residual networks on multi-channel time series for human activity recognition", *IEEE Sensors Journal*, 2021.
- [7] K. Wang, J. He, and L. Zhang, "Sequential weakly labeled multiactivity localization and recognition on wearable sensors using recurrent attention networks", *IEEE Transactions on Human-Machine Systems*, 2021.
- [8] X. Wang, L. Zhang, W. Huang, S. Wang, H. Wu, J. He, and A. Song, "Deep convolutional networks with tunable speed-accuracy trade-off for human activity recognition using wearables", *IEEE Transactions on Instrumentation and Measurement*, 2021.
- [9] H. Wu, Y. Duan, K. Yue, and L. Zhang, "Mashup-oriented web api recommendation via multi-model fusion and multi-task learning", *IEEE Transactions on Services Computing*, 2021.
- [10] Y. Tang, Q. Teng, L. Zhang, F. Min, and J. He, "Layer-wise training convolutional neural networks with smaller filters for human activity recognition using wearable sensors", *IEEE Sensors Journal*, vol. 21, no. 1, pp. 581–592, 2020.
- [11] Q. Teng, K. Wang, L. Zhang, and J. He, "The layer-wise training convolutional neural networks using local loss for sensor-based human activity recognition", *IEEE Sensors Journal*, vol. 20, no. 13, pp. 7265–7274, 2020.
- [12] Q. Teng and L. Zhang, "Data driven nonlinear dynamical systems identification using multi-step cldnn", *AIP Advances*, vol. 9, no. 8, p. 085311, 2019.
- [13] K. Wang, J. He, and L. Zhang, "Attention-based convolutional neural network for weakly labeled human activities' recognition with wearable sensors", *IEEE Sensors Journal*, vol. 19, no. 17, pp. 7598–7604, 2019.
- [14] L. Zhang, W. Zheng, F. Min, and A. Song, "Realizing reliable logic and memory function with noise-assisted schmitt trigger circuits", *Physics Letters A*, vol. 383, no. 7, pp. 617–621, 2019.
- [15] L. Zhang and A. Song, "Realizing reliable logical stochastic resonance under colored noise by adding periodic force", *Physica A: Statistical Mechanics and its Applications*, vol. 503, pp. 958–968, 2018.
- [16] L. Zhang, W. Zheng, and A. Song, "Adaptive logical stochastic resonance in time-delayed synthetic genetic networks", *Chaos: An Interdisciplinary Journal of Nonlinear Science*, vol. 28, no. 4, p. 043117, 2018.
- [17] Z. Wang, Z. Qiao, L. Zhou, and L. Zhang, "Array-enhanced logical stochastic resonance subject to colored noise", *Chinese Journal of Physics*, vol. 55, no. 2, pp. 252–259, 2017.
- [18] L. Zhang, W. Zheng, F. Xie, and A. Song, "Effect of the correlation between internal noise and external noise on logical stochastic resonance in bistable systems", *Physical Review E*, vol. 96, no. 5, p. 052203, 2017.
- [19] J. He, Y. Zhang, Y. Zhou, and L. Zhang, "Adaptive stochastic gradient descent on the grassmannian for robust low-rank subspace recovery", *IET Signal Processing*, vol. 10, no. 8, pp. 1000–1008, 2016.
- [20] L. Zhang, A. Song, and J. He, "Logic signals driven stochastic resonance in bistable dynamics subjected to  $1/f$  noise floor", *The European Physical Journal B*, vol. 80, no. 2, pp. 147–153, 2011.
- [21] L. Zhang, A. Song, and J. He, "Effect of colored noise on logical stochastic resonance in bistable dynamics", *Physical Review E*, vol. 82, no. 5, p. 051106, 2010.

- [22] J. He, L. Zhang, Q. Wang, and Z. Li, "Using diffusion geometric coordinates for hyperspectral imagery representation", *IEEE Geoscience and Remote Sensing Letters*, vol. 6, no. 4, pp. 767–771, 2009.
- [23] L. Zhang, A. Song, and J. He, "Stochastic resonance of a subdiffusive bistable system driven by lévy noise based on the subordination process", *Journal of Physics A: Mathematical and Theoretical*, vol. 42, no. 47, p. 475 003, 2009.
- [24] L. ZHANG and A.-g. SONG, "Development and prospect of stochastic resonance in signal processing", *ACTA ELECTRONICA SINICA*, vol. 37, no. 4, p. 811, 2009.
- [25] L. Zhang, J. He, and A. Song, "Stochastic resonance in saturation nonlinearities based on signal detection", *Fluctuation and Noise Letters*, vol. 8, no. 02, pp. L229–L235, 2008.

## PROFESSIONAL ACTIVITIES

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- TPC Member of AAAI 2022 in Vancouver, BC, Canada
- Director of Education and Teaching Committee of Jiangsu Instrumentation Society
- Communication evaluation expert of graduate dissertations in degree center of Ministry of Education
- Reviewer
  - *IEEE Transactions on Signal Processing*
  - *IEEE Transactions on Neural Networks and Learning Systems*
  - *IEEE Journal of Selected Topics on Signal Processing*
  - *IEEE Sensors Journal*
  - *IEEE Access*
  - *Signal Processing*
  - *The Visual Computer*
  - *IET Computer Vision*
  - *Journal of Supercomputing*
  - *Nonlinear Dynamics*
  - *Intelligent Systems with Applications*
  - *Scientific Reports*
  - *Chaos: An Interdisciplinary Journal of Nonlinear Sciences*
  - *Physics Letters A*
  - *European Journal of Physics*
  - *Engineering Research Express*
  - *Electronic Letters*
  - *Chinese Journal of Physics*
  - *Measurement Science and Technology*
  - *Physica Scripta*
  - *International Journal of Bifurcation and Chaos*
  - *International Journal of Environmental Research and Public Health*
  - *Sensors*
  - *Geo-spatial Information Science*
  - *Chemometrics and Intelligent Laboratory Systems*
  - *Indian Journal of Physics*