# Yang Lou, Ph.D.

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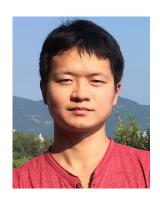
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#### **Profile**

- I am currently a *Postdoctoral Fellow* with Department of Electronic Engineering, City University of Hong Kong, Hong Kong, where I received my Ph.D. degree on October 2017. Before that, I received my B.E. degree in Electrical Information Engineering from Xidian University, China, in 2008, and M.S. degree in Computer Application Technology from Ningbo University, China, in 2012.
- My current research interests include *Evolutionary Computation* and *Complex Networks*.

## **Employment History**

2017/10 – present **Postdoctoral Fellow.** City University of Hong Kong.

Supervisor: Prof. Guanrong Chen

2017/04 – 2019/05 Research Fellow under the Postdoctoral Hub for ITF projects. City Univer-

sity of Hong Kong.

Supervisor: Dr. Kim Fung Tsang and Prof. Guanrong Chen

2016/12 - 2017/05 Research Assistant. City University of Hong Kong.

Supervisor: Dr. Shiu Yin Yuen

2009/05 – 2009/09 ■ Research Assistant. Ningbo University.

Supervisor: Dr. Junli Li

2008/03 – 2009/02 **System Engineer.** Zhejiang Supcon Technology Co., Ltd., Hangzhou,

China

#### **Education**

2013/12 – 2017/10 Ph.D., Department of Electronic Engineering, City University of Hong Kong in Evolutionary Computation.

Thesis title: Techniques for Improving Online and Offline History-assisted Evolutionary Algorithms.

Supervisor: Dr. Shiu Yin Yuen

2009/09 – 2012/03 M.S., College of Information and Science Engineering, Ningbo University in Computer Application Technology.

Thesis title: A Research of Population Ordering Strategies and Gravitational Group-

ing Model Based Evolutionary Algorithms.

Supervisor: Dr. Junli Li

## **Education (continued)**

2004/09 - 2008/07

■ B.E. School of Communication Engineering, Xidian University in Electronic Information Engineering.

#### **Research Publications**

### **Selected Journal Papers**

- Lou, Y. & Yuen, S. Y. (2019). On constructing alternative benchmark suite for evolutionary algorithms. Swarm and Evolutionary Computation, 44, 287–292. https://doi.org/10.1016/j.swevo.2018.04.005
- Lou, Y., Wang, L., & Chen, G. (2019). Local diversity-stability of the q-snapback network model. *Physica A: Statistical Mechanics and its Applications*, 121020. https://doi.org/10.1016/j.physa.2019.04.256
- Chen, G., Lou, Y., & Wang, L. (2019). A Comparative study on controllability robustness of complex networks. *IEEE Transactions on Circuits and Systems II: Express Briefs*, 66(5), 828–832. (Corresponding Author: Lou, Y.) https://ieeexplore.ieee.org/document/8678482
- He, Y., Yuen, S. Y., Lou, Y., & Zhang, X. (2019). A Sequential algorithm portfolio approach for black box optimization. Swarm and Evolutionary Computation, 44, 559–570. https://doi.org/10.1016/j.swevo.2018.07.001
- Lou, Y., Wang, L., & Chen, G. (2018). Toward stronger robustness of network controllability: A snapback network model. *IEEE Transactions on Circuits and Systems I: Regular Papers*, 65(9), 2983–2991. Shttps://ieeexplore.ieee.org/abstract/document/8338132
- Lou, Y., Chen, G., Fan, Z., & Xiang, L. (2018). Local communities obstruct global consensus:

  Naming game on multi-local-world networks. *Physica A: Statistical Mechanics and its Applications*, 492, 1741–1752. doi:10.1016/j.physa.2017.11.094. https://doi.org/10.1016/j.physa.2017.11.094
- 7 Lou, Y., Chen, G., & Hu, J. (2018). Communicating with sentences: A multi-word naming game model. *Physica A: Statistical Mechanics and its Applications*, 490, 857–868. https://doi.org/10.1016/j.physa.2017.08.066
- Yuen, S. Y., Lou, Y., & Zhang, X. (2018). Selecting evolutionary algorithms for black box design optimization problems. *Soft Computing*. https://link.springer.com/article/10.1007/s00500-018-3302-y
- Zhou, J., Lou, Y., Chen, G., & Tang, W. K. (2018). Multi-language naming game. Physica A: Statistical Mechanics and its Applications, 496, 620–634. https://doi.org/10.1016/j.physa.2017.12.124
- Lou, Y. & Yuen, S. Y. (2016). Non-revisiting genetic algorithm with adaptive mutation using constant memory. *Memetic Computing*, 8(3), 189–210. https://link.springer.com/article/10.1007/s12293-015-0178-6
- Yuen, S. Y., Chow, C. K., Zhang, X., & Lou, Y. (2016). Which algorithm should I choose: An evolutionary algorithm portfolio approach. *Applied Soft Computing*, 40, 654–673. https://doi.org/10.1016/j.asoc.2015.12.021

Lou, Y. & Chen, G. (2015). Analysis of the "naming game" with learning errors in communications. *Scientific Reports*, 5, 12191. https://www.nature.com/articles/srep12191

#### **Selected Conference Papers**

- Lou, Y., Yuen, S. Y., Chen, G., & Zhang, X. (2019, June). On-line search history-assisted restart strategy for covariance matrix adaptation evolution strategy. In *IEEE Congress on Evolutionary Computation (CEC 2019)* (pp. 1–8). (Accepted). Wellington, New Zealand: IEEE. % https://arxiv.org/abs/1903.09085
- Lou, Y., Yuen, S. Y., & Chen, G. (2018, July). Evolving benchmark functions using Kruskal-Wallis test. In *Genetic and Evolutionary Computation Conference (GECCO 2018)* (pp. 1337–1341). Kyoto, Japan: ACM. Shttps://dl.acm.org/citation.cfm?id=3208257
- Lou, Y. & Yuen, S. Y. (2017). A sequential learnable evolutionary algorithm with a novel knowledge base generation method. In *Simulated Evolution and Learning (SEAL 2017)* (pp. 51–61). Shenzhen, China: Springer. https://doi.org/10.1007/978-3-319-68759-9\_5
- 4 Lou, Y. & Yuen, S. Y. (2015). Non-revisiting genetic algorithm with constant memory. In *IEEE International Conference on Systems, Man, and Cybernetics* (pp. 1714–1719). Hong Kong: IEEE. https://ieeexplore.ieee.org/document/7379433

### **Books and Chapters**

- Lou, Y., Yuen, S. Y., & Chen, G. (2019). Evolving benchmark functions for optimization algorithms. In A. Adamatzky, S. G. Akl, & G. Sirakoulis (Eds.), From parallel to emergent computing (pp. 239–260). CRC Press. https://doi.org/10.1201/9781315167084
- Chen, G. & Lou, Y. (2019). Naming game: Models, simulations and analysis. Springer, Cham. https://doi.org/10.1007/978-3-030-05243-0

#### **Skills**

Languages Good reading, writing and speaking competencies for English, and native Mandarin Chinese.

Coding Matlab, C/C++, Python, LTEX, &. HTML.

More details on my Source Code web page:

https://fylou.github.io/sourcecode.html.

# Miscellaneous Experience

#### **Awards and Achievements**

Postdoctoral Fellowship of Hub for Incubatees and Innovation and Technology, Innovation and Technology Commission, Hong Kong.

2017 – 2019 **■ Postdoctoral Fellowship**, City University of Hong Kong.

2015 – 2016 ■ Institutional Research Tuition Scholarship, City University of Hong Kong.

Outstanding Academic Performance Award, City University of Hong Kong.

# Miscellaneous Experience (continued)

- The College of Science and Engineering Student Research Excellence Award, City University of Hong Kong. 

   The College of Science and Engineering Student Research Excellence Award, City University of Hong Kong.
  - Outstanding Academic Performance Award, City University of Hong Kong.
  - Jockey Club House Active Resident Award, City University of Hong Kong.
- 2013 2016  **Postgraduate Studentship**, City University of Hong Kong.
  - 2012 Outstanding Graduation Thesis of Ningbo University, Ningbo University.

#### **Teaching Activities**

- Teaching Assistant of **Topics in Computer Graphics** (EE5808), and **Applied Queueing Systems** (EE3313), City University of Hong Kong.
  - Teaching Assistant of Data Communications and Networking (EE3009), City University of Hong Kong.
- 2014 − 2015 Teaching Assistant of **Wireless Connectivity in Modern Society** (GE1339), City University of Hong Kong.
  - Teaching Assistant of Data Structures and Algorithms (EE2331), City University of Hong Kong.
- Teaching Assistant of Object-Oriented Programming and Design (EE2311), City University of Hong Kong.
- 2009 2011 ■ Teaching Assistant of C/C++ Programming, Ningbo University.

#### **Academic Services**

- I **Relation is a Editorial Member** for Journal of Electrical and Electronic Engineering.
- Reviewer for the journals including Swarm and Evolutionary Computation, IEEE Transactions on Cybernetics, IEEE Transactions on Circuits and Systems I: Regular Papers, IEEE Transactions on Communications, Information Sciences, National Science Review, Scientific Reports, Physica A: Statistical Mechanics and its Applications, IEEE Internet of Things Journal, IEEE Transactions on Emerging Topics in Computational Intelligence, IEEE Access, etc.
- Committee Member and/or Reviewer of the following conferences: CSSE 2019, CCSIT 2018, SAI 2018, SEAL 2017, and CECNet 2014, 2015.

# **Supplementary Information**

