

Yang Liu

Curriculum Vitae

✉ acw505@qmul.ac.uk

🌐 Enderlogic

Educational Background

2019

PhD in Bayesian network structure learning.

Queen Mary, University of London, UK

2017

2018

MSc in Artificial Intelligence.

University of Edinburgh, UK

Thesis: Posterior predictive check on Gaussian process, marked 68%

Average score of courses: 73%

2013

2017

BSc in Optoelectronic Information Engineering.

Beihang University, China

Average score: 85%

Award: First Prize in the 24th “Feng Ru Cup” Competition of Innovation

Publications

- 2023 **Yang Liu** and Anthony Constantinou. Improving the imputation of missing data with markov blanket discovery. In *International Conference on Learning Representations*, 2023.

Neville Kenneth Kitson, Anthony C Constantinou, Zhigao Guo, **Yang Liu**, and Kiattikun Chobtham. A survey of bayesian network structure learning. *Artificial Intelligence Review*, pages 1–94. Springer, 2023.

- 2022 **Yang Liu**, Anthony C Constantinou, and Zhigao Guo. Improving bayesian network structure learning in the presence of measurement error. *Journal of Machine Learning Research*, volume 23, pages 1–28. Journal of Machine Learning Research, 2022.

Yang Liu and Anthony C Constantinou. Greedy structure learning from data that contain systematic missing values. *Machine Learning*, volume 111, pages 3867–3896. Springer US, 2022.

Aiqi Jiang, Xiaohan Yang, **Yang Liu**, and Arkaitz Zubiaga. Swsr: A chinese dataset and lexicon for online sexism detection. *Online Social Networks and Media*, volume 27, page 100182. Elsevier, 2022.

Anthony C Constantinou, **Yang Liu**, Neville K Kitson, Kiattikun Chobtham, and Zhigao Guo. Effective and efficient structure learning with pruning and model averaging strategies. *International Journal of Approximate Reasoning*, volume 151, pages 292–321. Elsevier, 2022.

- 2021 Anthony C Constantinou, **Yang Liu**, Kiattikun Chobtham, Zhigao Guo, and Neville K Kitson. Large-scale empirical validation of bayesian network structure learning algorithms with noisy data. *International Journal of Approximate Reasoning*, volume 131, pages 151–188. Elsevier, 2021.
- 2020 Anthony C Constantinou, **Yang Liu**, Kiattikun Chobtham, Zhigao Guo, and Neville K Kitson. The bayesys data and bayesian network repository. *Queen Mary University of London: London, UK*, 2020.

Project experience

MSc Thesis

TITLE	Posterior predictive check on Gaussian process
SUPERVISOR	Dr Sohan Seth
DESCRIPTION	This project applied Posterior predictive check (PPC) on Gaussian process model based on different statistics in order to criticize the model in different aspects.
RESULTS	Successfully criticize the Gaussian process model on six data sets and analysis the features and capabilities of different statistics.

Teaching experience

Demonstrator	<ul style="list-style-type: none">○ Bayesian Decision and Risk Analysis, 2020 - 2023○ Data Analytics, 2022 - 2023
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Skills

- R/Matlab/Python
- Pytorch programming experience
- Bayesian inference