Lizhong Chen

Contact Information

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Address: 1G, Royal Parade, Parkville VIC 3052

Research interests

Bioinformatics: limma, edgeR; Model selection; Model averaging; Dimension

reduction; High dimensional data.

Employment

03/2022 - Walter and Eliza Hall Institute of Medical Research (WEHI)

Present Research Officer at the Bioinformatics Division

Supervisor: Prof. Gordon K Smyth

Education

02/2017 - The University of Melbourne

02/2022 Doctor of Philosophy (PhD) in Statistics

Supervisors: A/Prof. Guoqi Qian, Prof. Yuriy Kuleshov, Dr Tingjin Chu

Thesis: Model selection and averaging by Gibbs sampler with a tropical cyclone sea-

sonal forecasting application

09/2013 - **Peking University**

07/2016 Master of Science (M.S.) in Mathematics

Mentor: Prof. Houhong Fan

09/2009 - Peking University

06/2013 Bachelor of Science (B.S.) in Mathematics

Mentor: Prof. Houhong Fan

Honors and scholarships

2017 Melbourne Research Scholarship (The University of Melbourne).

| 2016 | Outstanding Graduate in Peking University, and Beijing |
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| 2015 | Guanghua Scholarship (Peking University) |
| 2014 | National Scholarship (Peking University) |

Publications

Variable selection in high dimensional data using Gibbs sampler with Guoqi Qian, in preparation.

Model averaging in high dimensional data via Gibbs sampler with Guoqi Qian, Tingjin Chu, in preparation.

Variable selection via ridge estimate using a hybrid Gibbs sampler with Guoqi Qian, in preparation.

Improving the seasonal tropical cyclone forecast in Australian and south Pacific ocean regions by model selection and model averaging methods based on Gibbs sampling

with Guoqi Qian, Yuriy Kuleshov, in preparation.

A sliced inverse regression approach to the tropical cyclone seasonal foreacasting

with Guoqi Qian, Yuriy Kuleshov, in preparation.

Teaching experience

| 07/2017 - | Tutor, The University of Melbourne |
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| 02/2022 | Linear Algebra, Accelerated Mathematics I/II, Complex Analysis, Multivariate Statis- |
| | tical Techniques |
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| 07/2018 - | Assignment and Exam Marker, The University of Melbourne |
| 07/2021 | Statistical Modelling, Mathematical statistics, |
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| 09/2013 - | Teaching assistant, Peking University |
| 07/2016 | Mathematical analysis I/II, Calculus I, Advanced algebra I. |

Technical skills

Programming languages

Proficient in: R language Familiar with: Python

R Package: IBGS(Iterated Blockwise Gibbs Sampler)

https://github.com/Kaukol/IBGS