Yu Tian

Mathematical Institute, University of Oxford, Oxford, OX2 6GG

☑ yu.tian@maths.ox.ac.uk ☐ +44 1865 273580

EDUCATION

University of Oxford

Oxford, UK

DPhil. Mathematics

Sep 2018 - Present

- o Topic: Role extraction in bipartite networks (our industrial partner is Tesco).
- o Supervision: Prof. Renaud Lambiotte.

University of Manchester

Manchester, UK

BSc. Mathematics and Statistics (2 + 2 Dual Degree)

Sep 2016 - Jun 2018

- First Class Hons.
- o Final project topic: Model Selection versus Model Averaging in Gaussian Processes.
- Description: proposed a new approach model averaging in parameter estimation, and achieved it though Monte Carlo method; ameliorated the model visualisation method; compared this overall method with the classical model selection in real data (code implemented in Python).
- o Supervision: Dr. Thomas House.

Beijing Institute of Technology

Beijing, China

BSc. Mathematics (2 + 2 Dual Degree)

Sep 2014 - Jun 2016

o GPA 3.79/4.

INDUSTRIAL EXPERIENCES

Air Products

Walton-on-Thames, UK

Research Intern

July - Sep. 2019

- Incorporated both the inventory management and the transshipment of products to the mixed integer programming model.
- Proposed several relaxation methods and heuristics to improve solving efficiency.

European Study Group with Industry 145

Cambridge, UK

Participant

Apr. 2019

o Worked in groups on hardening techniques for classifying images.

OTHER ACTIVITIES

Outreach activities

o Volunteer at Oxford Maths Festival (Magic Mathsworks & Hands-on Maths), Feb. 2020

HONOURS AND AWARDS

- o EPSRC InFoMM CDT Studentship (fully-funded PhD studentship, 2018 2022)
- o First Prize in China Undergraduate Mathematical Contest in Modelling (Beijing, 09/2016 & 09/2015)
- o First-Class People's Scholarship (5% in academia, 2014-2016)
- o National Scholarship (5% in academic, research and other activities, 2014-2015)

SKILLS

- IT skills: Proficiency in Python (pandas, numpy, scipy, networkx, statsmodels, scikit-learn),
 MATLAB, LaTeX, git; Familiarity with R Language, C Language, Lingo
- Languages: Chinese (native), English (fluent)
- o Interests: Cycling, Volleyball, Basketball, Football
- o Music: Guzheng

PUBLICATIONS AND REPORTS

Publications

• **Y. Tian**, S. Lautz, A. Wallis and R. Lambiotte. *Extracting complements and substitutes from sales data: a network perspective*. Submitted.

Technical Reports

 M. Benning, L. Bonthrone, T. Carr, J. Dyer, A. Malip, M. McGuigan, A. Puiu, Y. Tian, A. Wendland and L. Yang. *Identifying potential hardening techniques for image classifiers*. Report for European Study Group with Industry 145, Cambridge, UK, 2019.