

EDUCATION

University of Oxford

DPhil (PhD) in Computer Science

Oxford, UK

2018 –2022

- Supervised by Leslie Ann Goldberg and Andreas Galanis in the Algorithms and Complexity group.
- I worked on randomised approximation algorithms for counting and sampling problems in graphs.

Imperial College London

MEng in Mathematics and Computer Science (First Class Honours)

London, UK

2013 –2017

- Thesis title: *The computational complexity of bribery in a network-based rating system* (awarded ‘Distinguished Project’, 2017).

EXPERIENCE

Samsung Research

Research Intern

London, UK

September 2022 –Present

- I am part of the Advanced Research Team, where I am working on research at the intersection of deep learning and graphs.

Amadeus

Software Engineer

Nice, France

2017 –2018

TECHNICAL SKILLS

Python (PyTorch, NumPy, NetworkX), C++, Unix, Git, L^AT_EX.

PUBLICATIONS

1. J. Stewart. *Randomised algorithms for low temperature spin systems*. Doctoral dissertation, University of Oxford, 2022.
2. A. Galanis, L. A. Goldberg, and J. Stewart. *Fast mixing via polymers for random graphs with unbounded degree*. Information and Computation (2022): 104894. An extended abstract also appeared at APPROX-RANDOM 2021. [†]
3. A. Galanis, L. A. Goldberg, and J. Stewart. *Fast algorithms for general spin systems on bipartite expanders*. ACM Transactions on Computation Theory (TOCT) 13, no. 4 (2021): 1-18. An extended abstract also appeared at MFCS 2020. [†]
4. Z. Chen, A. Galanis, L. A. Goldberg, W. Perkins, J. Stewart, and E. Vigoda. *Fast algorithms at low temperatures via Markov chains*. Random Structures & Algorithms 58, no. 2 (2021): 294-321. An extended abstract also appeared at APPROX-RANDOM 2019. [†]
5. U. Grandi, J. Stewart, and P. Turrini. *Personalised rating*. Autonomous Agents and Multi-Agent Systems 34, no. 2 (2020): 1-38. [†]
6. U. Grandi, J. Stewart, and P. Turrini. *The complexity of bribery in network-based rating systems*. AAAI Conference on Artificial Intelligence, vol. 32, no. 1. 2018. [†]

[†]Authors listed in alphabetical order.