

## EDUCATION

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- University of Oxford** Oxford, UK  
DPhil (PhD) in Computer Science 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** London, UK  
MEng in Mathematics and Computer Science (First Class Honours) 2013 –2017
- Thesis title: *The computational complexity of bribery in a network-based rating system* (awarded ‘Distinguished Project’, 2017).

## EXPERIENCE

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- Samsung Research** London, UK  
Research Intern September 2022 –Present
- I am part of the Advanced Research Team, where I am working on research at the intersection of deep learning and graph theory.
- Amadeus** Nice, France  
Software Engineer 2017 –2018

## TECHNICAL SKILLS

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Python (PyTorch, NumPy, NetworkX), C++, Unix, Git, L<sup>A</sup>T<sub>E</sub>X.

## PUBLICATIONS

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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*. AAI Conference on Artificial Intelligence, vol. 32, no. 1. 2018. †

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†Authors listed in alphabetical order.