

The Alan Turing Institute Survival Guide



Ganna Pogrebna

www.gannapogrebna.com

Challenges



Revolutionise healthcare



Deliver safer, smarter engineering



Manage security in an insecure world



Shine a light on our economy



Make algorithmic systems fair,
transparent, and ethical



Design computers for the next
generation of algorithms



Supercharge research in science and
humanities



Foster government innovation

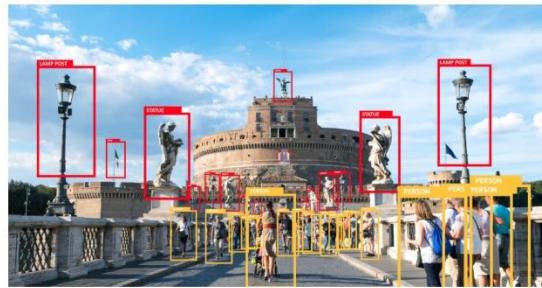
Programmes



Health



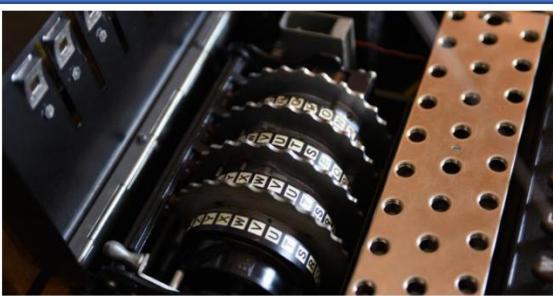
Public policy



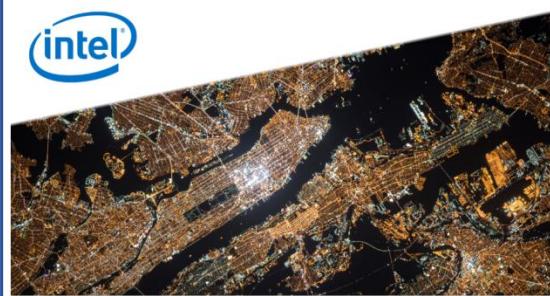
Artificial intelligence (AI)



Economic data science



Defence and security

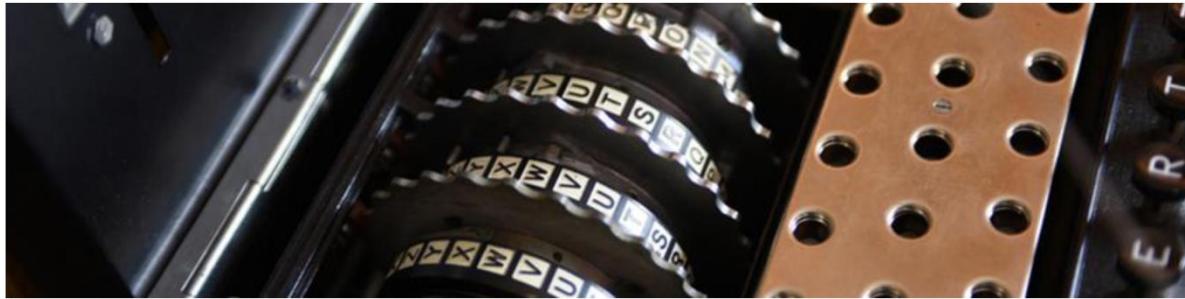


Data science at scale



Data-centric engineering

Defence and Security



Director, Dr Mark
Briers



Manager, Catherine
Lawrence



Economic Data Science



Manager, Dr Mahlet
(Milly) Zimeta



Dr Stephen Hansen



Data-centric Engineering



Manager, Darren
Grey



Director, Professor
Mark Girolami



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Computer science

Subject Areas:
complexity

Keywords:
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Author for correspondence:
Weisi Guo
e-mail: weisi.guo@warwick.ac.uk

Global network centrality of university rankings

Weisi Guo^{1,4}, Marco Del Vecchio², and
Ganna Pogrebna^{3,4,5}

¹School of Engineering, ²Department of Statistics, and ³Warwick Manufacturing Group, University of Warwick, Warwick, UK

⁴The Alan Turing Institute, London, UK

⁵Birmingham Business School, University of Birmingham, Birmingham, UK

WG, 0000-0003-3524-3953

Universities and higher education institutions form an integral part of the national infrastructure and prestige. As academic research benefits increasingly from international exchange and cooperation, many universities have increased investment in improving and enabling their global connectivity. Yet, the relationship of university performance and its global physical connectedness has not been explored in detail. We conduct, to our knowledge, the first large-scale data-driven analysis into whether there is a correlation between university relative ranking performance and its global connectivity via the air transport network. The results show that local access to global hubs (as measured by air transport network *betweenness*) strongly and positively correlates with the ranking growth (statistical significance in different models ranges between 5% and 1% level). We also found that the local airport's aggregate flight paths (*degree*) and capacity (*weighted degree*) has no effect on university ranking, further showing that global connectivity distance is more important than the capacity of flight connections. We also examined the effect of local city economic development as a confounding variable and no effect was observed suggesting that access to global transportation hubs outweighs economic performance as a determinant of university ranking. The impact of this research is that we have determined the importance of the centrality of global connectivity and, hence, established initial evidence for further exploring potential connections between university ranking and regional investment policies on improving global connectivity.

Special Interest Groups (SIGs)



Privacy-preserving data analysis



Data science and digital humanities



Logic for data science



Urban analytics



Data science for sports, activity, and...



Online machine learning



Social data science



Natural language processing



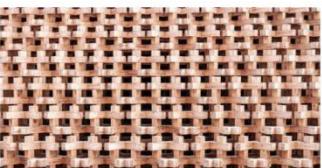
Data science for mental health



Fairness, transparency, privacy



Data Ethics Group



Topology and geometry for data



Data and inequality



High dimensional statistics



Low-dimensional structure in data: ...



Protocol governance: Blockchain an...



Sampling algorithms for data analytics

Leadership & Resources

Sir Alan Wilson, Chief Executive Officer

Email: info@turing.ac.uk



Jonathan Atkins, Chief Operating Officer

Email: info@turing.ac.uk



Christine Foster, Managing Director for Innovation

Email: cfoster@turing.ac.uk



Donna Brown, Director of Academic Engagement

Email: info@turing.ac.uk



Nico Guernion, Director of Partnerships

Email: info@turing.ac.uk



Jaquelyn El Nemer, EA Support

Email: reception@turing.ac.uk



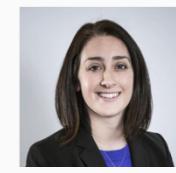
Ben Murton, Head of Researcher Development and Training

Email: info@turing.ac.uk



Beth Wood, Press and Communications Manager

Email: communications@turing.ac.uk



Shana Tufail, Communications and Marketing Manager

Email: communications@turing.ac.uk



Helena Quinn, Policy Officer

Email: info@turing.ac.uk



Resources



Research Engineering

Jump to: [Data scientists](#) | [Research software engineering](#) | [Projects](#) | [Working with us](#) | [People](#)

Data Study Groups



[Turing lectures](#)

[Data summits](#)

[Symposia](#)

[Workshops](#)

Other

[Bayesian inference and maximum entropy methods in science and engineering](#)

Monday 2nd - Friday 6th July, 2018

The Alan Turing Institute

Organisers:
Axel Gandy
Grigoris Pavliotis

Day 1: 10:00 – 20:00
Day 2: 9:00 – 19:00
Day 3: 9:00 – 21:00
Day 4: 9:00 – 18:40
Day 5: 9:00 – 13:00

Other

[Data and inequality: Towards data justice? Reframing the datafication debate](#)

Monday 9th July, 2018

The Alan Turing Institute

Speaker: Dr Lina Dencik

Time: 16:00 – 17:30

Other

[Summit on machine learning meets formal methods](#)

Friday 13th July, 2018

University of Oxford

Organisers:
Marta Kwiatkowska
Nathanael Eijerkamp
Stephen Roberts

Time: To be announced

Other

[Deep Learning: working with convolutional neural networks – a hands on workshop](#)

Tuesday 17th July, 2018

The Alan Turing Institute - Enigma

Speakers: Chanuki Illushka Seresinhe (Doctoral Researcher) and Stephen Law (Turing Research Fellow)

Time: 14:00 – 17:00

Tips

- be active
- be present
- approach people (especially Programme Leads and Managers)
- submit applications to open calls
- join/propose/organise a SIG
- take part in events
- find like-minded collaborators within Turing
- check-out the new ESRC-Turing Call for Fellows (Internal University of Birmingham Deadline: July 12, 2018)



**ESRC-The Alan Turing Institute
Joint Fellowship Scheme 2018
Call specification**

- machine learning and artificial intelligence
- blockchain technology
- big data analytics
- distributed systems, mobile payments, peer-to-peer application
- modelling of volatility, risk and uncertainty