



The Alan Turing Institute Survival Guide

Ganna Pogrebna

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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

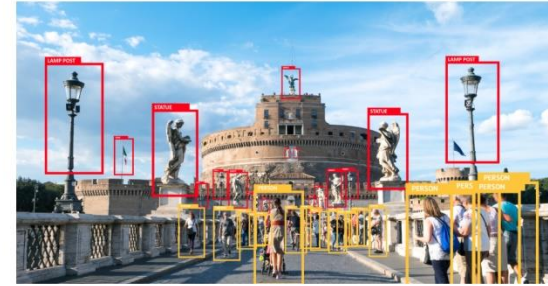
Programmes



Health



Public policy



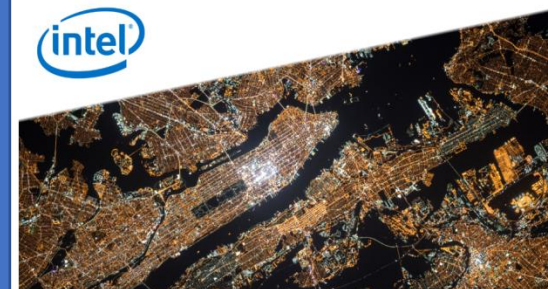
Artificial intelligence (AI)



Economic data science



Defence and security



Data science at scale



Data-centric engineering

Defence and Security



Director, Dr Mark
Briers



Manager, Catherine
Lawrence





Manager, Dr Mahlet
(Milly) Zimeta



Dr Stephen Hansen

Economic Data Science



Data-centric Engineering



Manager, Darren
Grey



Director, Professor
Mark Girolami



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Computer science

Subject Areas:
complexity

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transport network

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Global network centrality of university rankings

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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



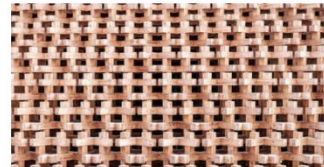
Data science for mental health



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

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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 Grigorios 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 Fijalkow 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