

# Spatial Data Science

Keynote Response

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Geographic  
Data Science  
Lab

# The Rise of Data Science

# Data, Data, Data

Every-*thing* produces data

*New, dense, quantitative representations* of the world

But **data** is not useful, **insights** are

Data Science

# Data Science

*“gathering data, massaging it into a tractable form, making it tell its story, and presenting that story to others.”*

Loukides (2011)

# Hold on...

- A lot of the *new* data is *spatial* data
- Spatial *is* special
- We don't want to reinvent the (GISc) wheel

*How can we bring the best of both worlds together?*



**It's called  
GEOGRAPHIC Data  
Science!!!**

# Geo/Spatial Data Science

# Why?

Fully tap into the new data revolution

- Data are different (“*half-baked*”)
- New data allow more flexibility (+ data, - structure)

“Business-as-usual” best approach?

# A (rough) sketch

# Potential Benefits

- Fully leverage the new data revolution
- Do not reinvent the wheel
- New answers to old questions (e.g. MAUP)
- Old answers in new contexts
- New questions to answer (new methods?)
- ...

Getting *everyone* behind G/SDS

# G/SDS is for *all*

Industry & Academia

- Shared problems
- Complementary resources

Clear synergies

# Challenges

- Communication → *what's needed/valued?*
- Interaction → *how?*
- Credit → *Fame-sharing*

# For example...

- Teach relevant G/SDS skills
- Provide close interaction w/ industry in training
- Build platforms that enabling data sharing/access

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Programme start: **September 2018**

Entry requirements: **You will need a 2:1 Honours degree or better in an appropriate field of study. Individual consideration is given to mature students with significant and relevant experience and with professional qualifications.**



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- › University of Leeds
- › University of Liverpool
- › University of Manchester
- › University of Sheffield

The CDT encourages significant advances which bring together social science with methods from computing, mathematics and the natural sciences.

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- › Promoting the creation and analysis of new longitudinal and streamed data resources for socio-economic investigations.
- › Creating new methods (e.g. scaling up existing methods for real time big data analytics),
- › Investigating social processes (e.g. virtualisation of retailing; data-driven decision making and social behaviours)
- › Facilitating interventions (e.g. resource targeting, network planning, social media apps for diet, travel, lifestyle planning).



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