

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 duration: **Full-time: 12 months**

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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Data CDT Doctoral Training

Data Analytics and Society is an ESRC funded Centre for Doctoral Training providing postgraduate research and training across 4 Universities:

- › 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.

This is an exciting opportunity to undertake a 4-year funded integrated PhD and MSc in Data Analytics and Society.

The programme includes an integrated MSc in Data Analytics over the first two years which will provide you with the foundation skills to complete your research project.

The Centre is focused on

- › 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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