

Spatial Data Science

Keynote Response

Dani Arribas-Bel [[@darribas](#)]



UNIVERSITY OF
LIVERPOOL



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

For example...

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



[University home](#) > [Study](#) > [Postgraduate Taught](#) > [Master's programmes](#) > [Taught](#) > [Faculty of Science and Engineering](#)

Geographic Data Science MSc

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.**



[Scholarships available](#)

Apply >

Add this to your personalised prospectus >

Meet us >



[Overview](#)

[Module details](#)

[Entry requirements](#)

[Fees](#)

[Applying](#)

[Career prospects](#)

[About us](#)

For example...

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



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.

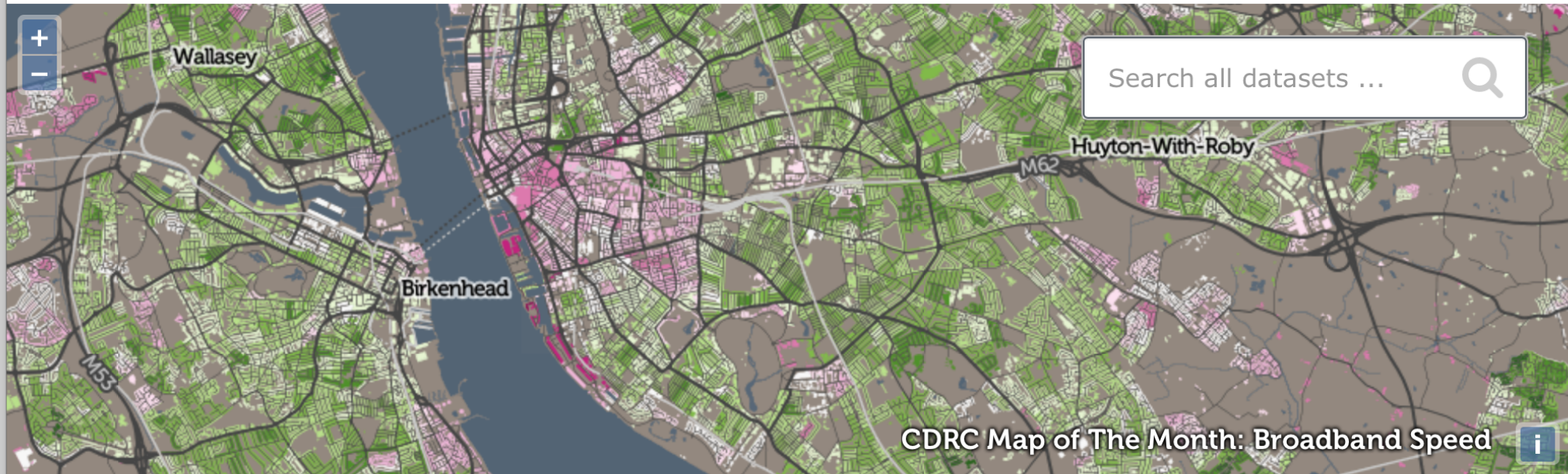
The Centre is focused on

- > 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).



For example...

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



Welcome to the CDRC Data Service

This website provides a searchable catalogue of the data products held by the CDRC. Our service has three tiers: **Open**, **Safeguarded** and **Secure**. Where data are flagged as open you can register and download these today. Access to data held in our Safeguarded and Secure service levels requires registration and application approval. Further details can be found on our [main website](#).

Latest Secure/Safeguarded Service Data

Regional Transport Provider - Vehicle Position Data **Secure**

This dataset contains GPS-tracked vehicle position data, including service numbers, schedules, fleet numbers, position in GPS coordinates and heading. This controlled dataset...

CAMEO Classifications Postcode Directory **Safeguarded**

Callcredit Marketing Solutions has a wide range of consumer postcode classifications available for both the UK and abroad. These powerful segmentation systems are supplied...

Spatial Data Science

Keynote Response

Dani Arribas-Bel [[@darribas](#)]



UNIVERSITY OF
LIVERPOOL



Geographic
Data Science
Lab