

LAK13 Panel: Educational Data Scientists: A Scarce Breed

<http://bit.ly/LAK13-EDS-Panel>



Simon Buckingham Shum
Knowledge Media Institute
The Open University



Ryan S.J.d. Baker
Teachers College
Columbia University



John Behrens
Center for Digital Data,
Analytics, & Adaptive Learning
Pearson



Martin Hawksey
Jisc CETIS



Naomi Jeffery
The Open University
in Scotland



Taylor Martin
Utah State University

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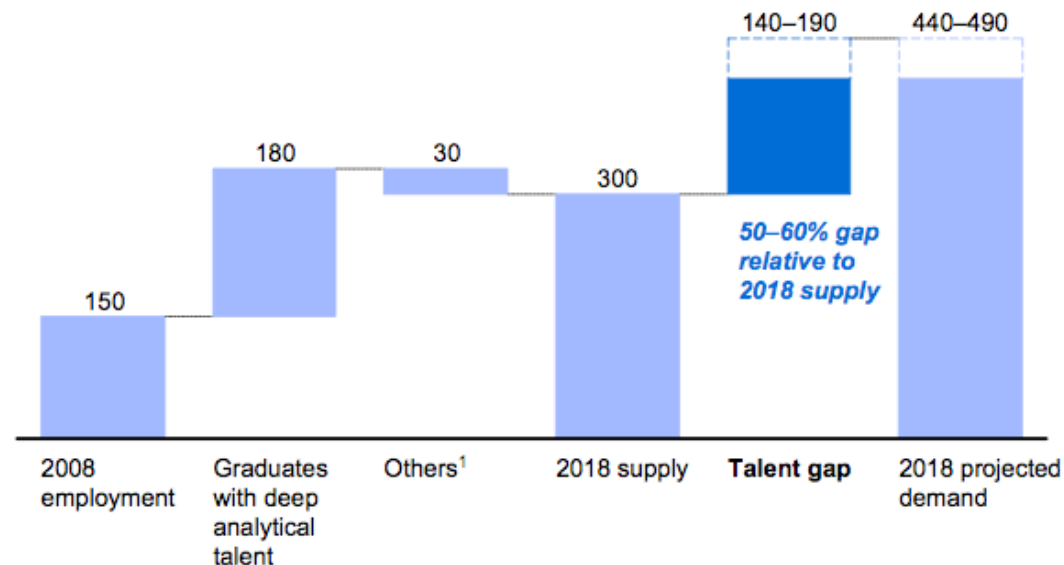


6. THERE WILL BE A SHORTAGE OF TALENT NECESSARY FOR ORGANIZATIONS TO TAKE ADVANTAGE OF BIG DATA

Exhibit 4

Demand for deep analytical talent in the United States could be 50 to 60 percent greater than its projected supply by 2018

Supply and demand of deep analytical talent by 2018
Thousand people



¹ Other supply drivers include attrition (-), immigration (+), and reemploying previously unemployed deep analytical talent (+).

SOURCE: US Bureau of Labor Statistics; US Census; Dun & Bradstreet; company interviews; McKinsey Global Institute analysis

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Data Scientist: The Sexiest Job of the 21st Century

by Thomas H. Davenport and D.J. Patil

Comments (86)



**Harvard
Business
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THE MAGAZINE

October 2012

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ABSTRACT

The *Educational Data Scientist* is currently a poorly understood, rarely sighted breed. Reports vary: some are known to be largely nocturnal, solitary creatures, while others have been reported to display highly social behaviour in broad daylight. What are their primary habits? How do they see the world? What ecological niches do they occupy now, and will predicted seismic shifts transform the landscape in their favour? What survival skills do they need when running into other breeds? Will their numbers grow, and how might they evolve? In this panel, the conference will hear and debate not only broad perspectives on the terrain, but will have been exposed to some real life specimens, and caught glimpses of the future ecosystem.

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LAK13 Panel – Educational Data Scientists: A Scarce Breed

By [sbs](#) on March 14th, 2013

At the imminent [LAK13 conference](#), we're convening a panel to investigate an important challenge for the field - the skills shortage, definition, and career trajectory for **data scientists in education**. Who?...

19

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9

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Over the coming few weeks before LAK13, we want to gauge the community thoughts and queries on these issues.

Specifically, we invite your questions to the panel!...



Christopher A. Brooks (cab938)

2 hours

If there is time - what is the one skill as supervisors of the coming generation of educational data scientists that we need to strengthen?

[reply](#)



RadHertz

17 hours

The Educational Data Scientist is connecting node between or among different disciplinary domains, much like medical informaticists. As a result they need to know both the computational skills plus visualisation options, but also enough of the different disciplinary core concepts to advance their analysis as performed through these techniques. In this sense it may distinguish somewhat Xavier's question in asking the difference between the EDS & an educational researcher.

[reply](#)



Xavier Ochoa

1 day ago

What is the difference between the Educational data scientist and the traditional Educational researcher? Is it just a matter of tools or methodologies or there is a deeper difference?

[reply](#)

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We Need More Education Data Scientists

Ryan S.J.d. Baker

Teachers College, Columbia University

Increasing Demand in Industry

- Raise your hand if you're in industry, and you just hired or are about to hire one!

Increasing Demand in Academia

- North Carolina State just hired two!
 - Teachers College Columbia just hired one!
 - Tel Aviv just hired one!
 - Memphis just hired one!
 - Wisconsin just hired one!
 - WPI just hired one!
 - CMU just interviewed several!
 - UC Berkeley just interviewed one!
 - Nebraska is recruiting now!
 - Utah State might be recruiting next year!
 - UC Boulder might be recruiting next year!
-
- Raise your hand if you're at a university, and you just hired one or are about to hire one!

Really Amazes Me

- Just compare to two years ago...

Educational Data is Special!

- Not the same as other kinds of data

We need more grad programs specialized in this!

- Learning Analytics @ TC
 - Take a flier, tell your students
- Learning Sciences and Engineering @ CMU
- Learning Sciences and Technologies @ WPI
- Where else? Tell me about it!

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Educational Data Scientists Should be deep-thinking philosophers too.

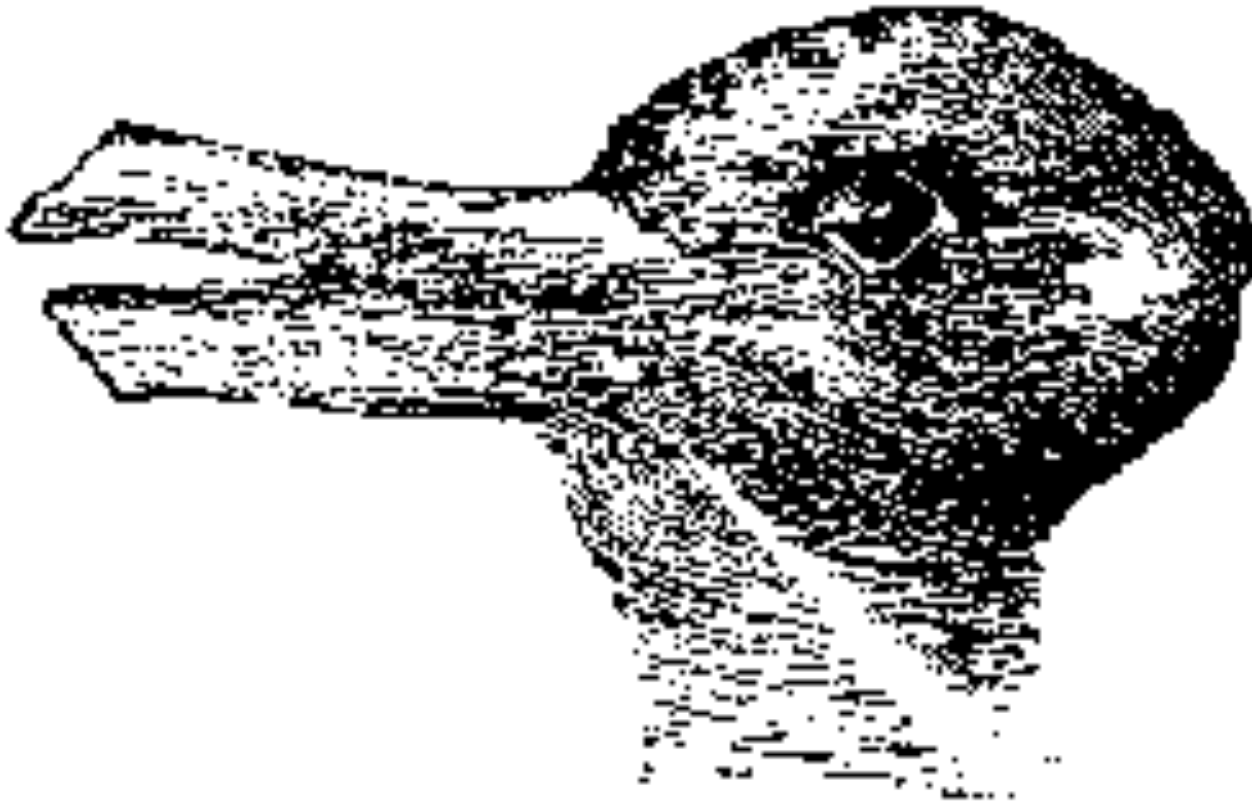
John T. Behrens



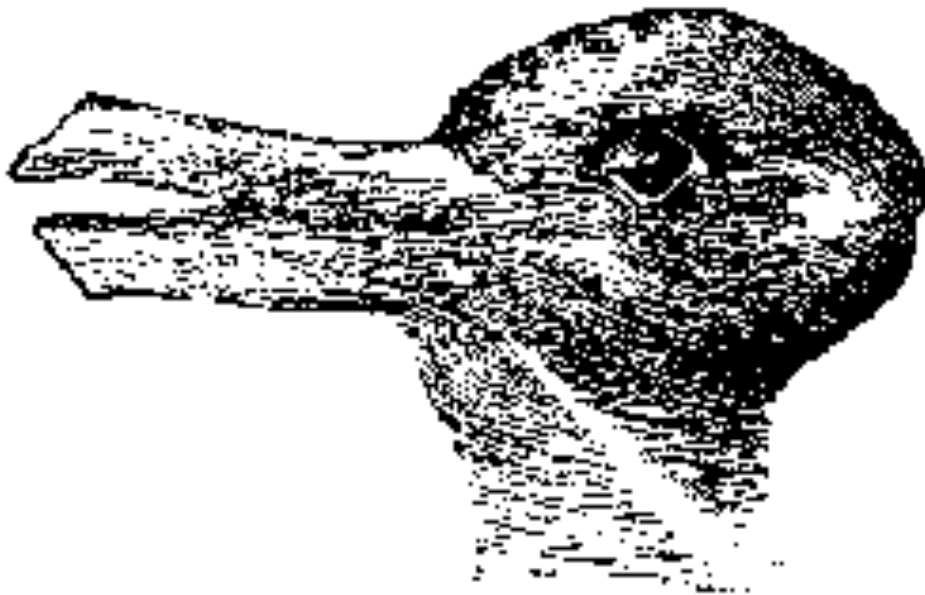
Digital Data,
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John Behrens, Ph.D.

I will show you a picture. As soon as you know what it is, I want you to raise your hand. But do not say anything (no cheating!!!)



What is it?



- Is it a duck?
- Is it a rabbit?
- Is it a.....?

Another game!

Another game?

Are these words data?

**If these words are
data...**

**In what way do we
mean it?**

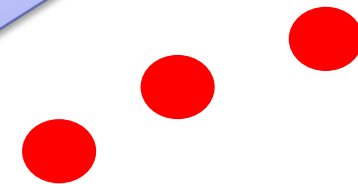
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Things that make me crazy

“Looks cool. What does it mean?”

“I don’t know”

“Looks great at a high level, how have you explored it and tested the assumptions?”

“What assumptions?”

“What are the relevant background issues in this area?”

“Ask the SME, I’m just the data person”

“Does it really make sense to get that result?”

“I don’t know, it just came out that way”

Be a philosopher

Don't let your schooling

**Interfere with your
education**

Question

Assumptions

Thank You!

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JISC **cetis**

centre for educational technology
& interoperability standards

**Electronic Distance Measurement to
Educational Data Mining (EDM to EDM)**

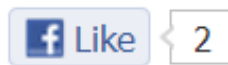
Martin Hawksey (@mhawksey)

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IBM's CEO Says Big Data is Like Oil, Enterprises Need Help Extracting the Value

MARIA DEUTSCHER | MARCH 11TH

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IBM chief executive officer Ginni Rommetty regards analytics as a new source of competitive advantage for her company's enterprise clientele.

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A still from the movie Star Wars: The Force Awakens. On the left, Yoda, an elderly green alien with a white beard, wearing a dark grey hooded robe, looks towards Luke Skywalker. On the right, Luke Skywalker, a young man with shaggy blonde hair, wearing a white shirt, looks back at Yoda. They are in a dimly lit, industrial-looking environment. A grey speech bubble with a white border points from the text to Yoda.

Luke, view the source...

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5	4	01007011	Beasley Susan	P2	P5	P5	D1	9	6	6	5	6.5	5.7	70	
6	5	01007304	Figueirado Robin	D1	D1	P3	P3	5	5	8	8	6.5	7.0	58.75	
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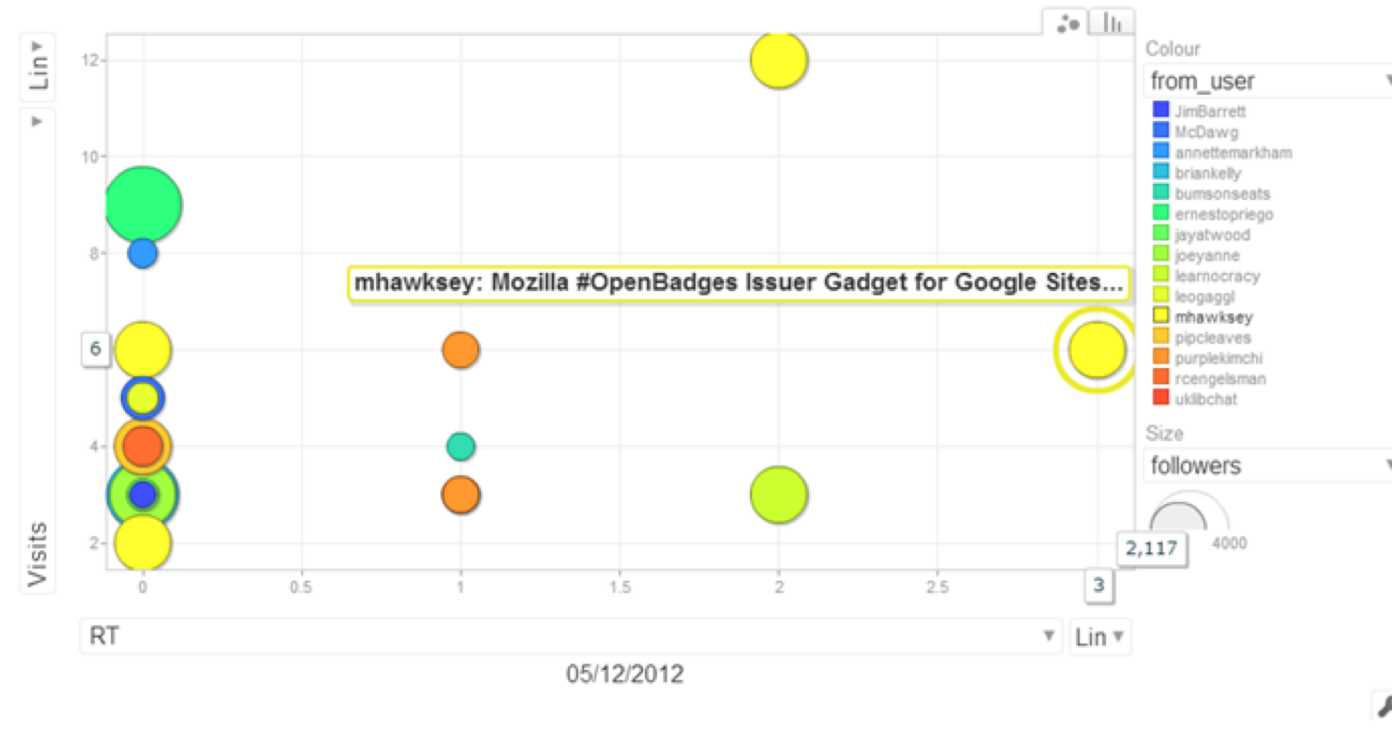
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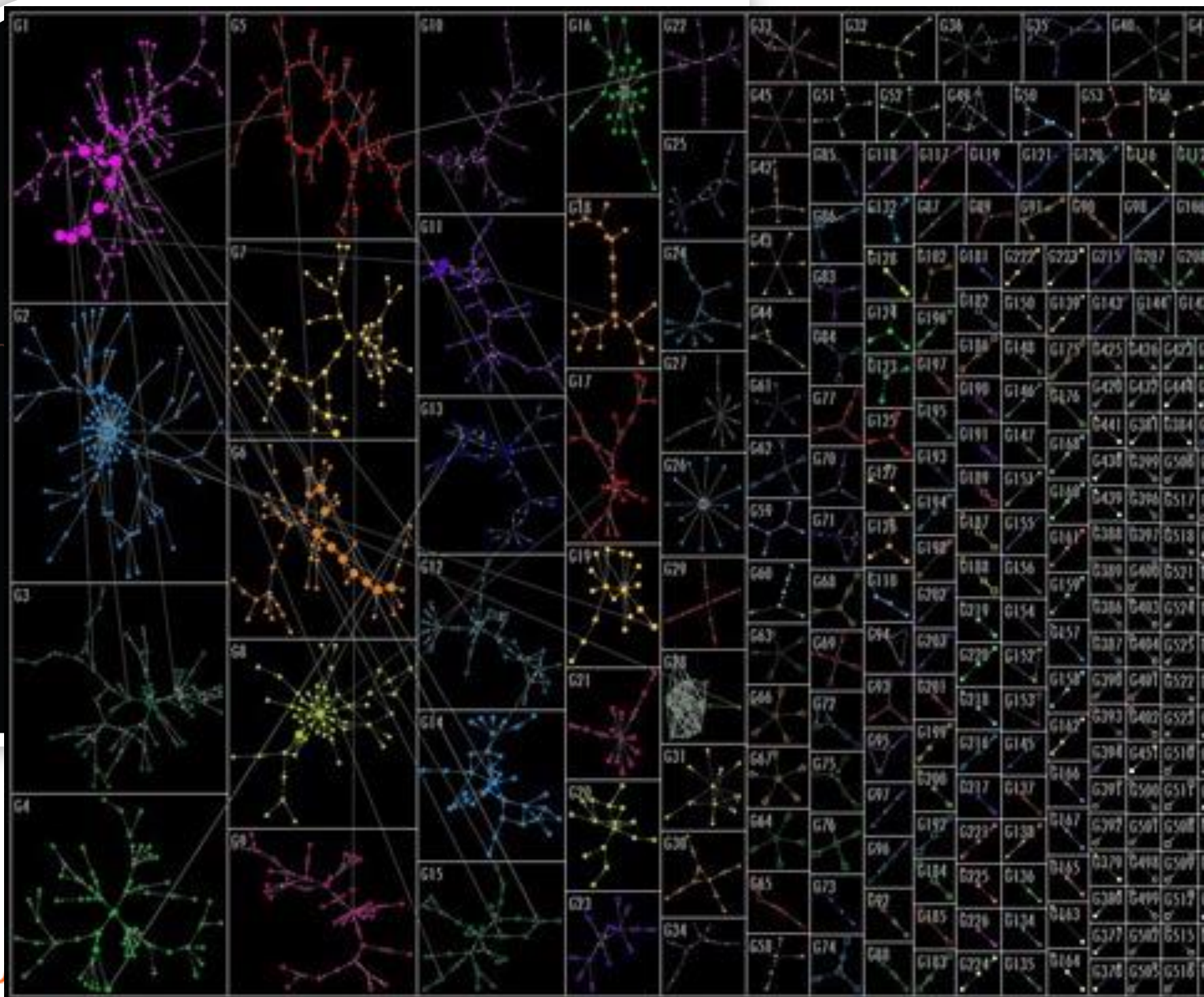
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5	synote mobile	Synote mobile phone testing	http://access.ecs.soton.ac.uk	03/08/2012 15:37:29	E.A. Draffan	Research, Testing, Uncategorized, Android, iOS, iPhone HTC, media elements js, mobile phones, OERI, Sony, ukolr, videos		0	0	0	0	0	0	0	0	0	0
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10	synote mobile	Feedback on prototype Synote Mobile	http://access.ecs.soton.ac.uk	30/07/2012 16:44:33	E.A. Draffan	Meeting, Uncategorized, CSS3, Galaxy Samsung tablet, HTML5, iPad, iPhone, Cent, synote mobile, ukolr		0	0	0	0	0	0	0	0	0	0
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13	bebop	Bebop progress log - 09/07/2012 &	http://bebop.blogs.lin	20/07/2012 15:44:26	David Whitehead	Uncategorized		0	0	0	0	0	0	0	0	0	0
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15	sharing paradata across SPASWS: Its all started coming together		http://scottbw.wordpress.com	17/07/2012 17:33:51	scottbw	apps, development, open education, widgets, cent		2	0	0	0	0	0	0	0	0	1
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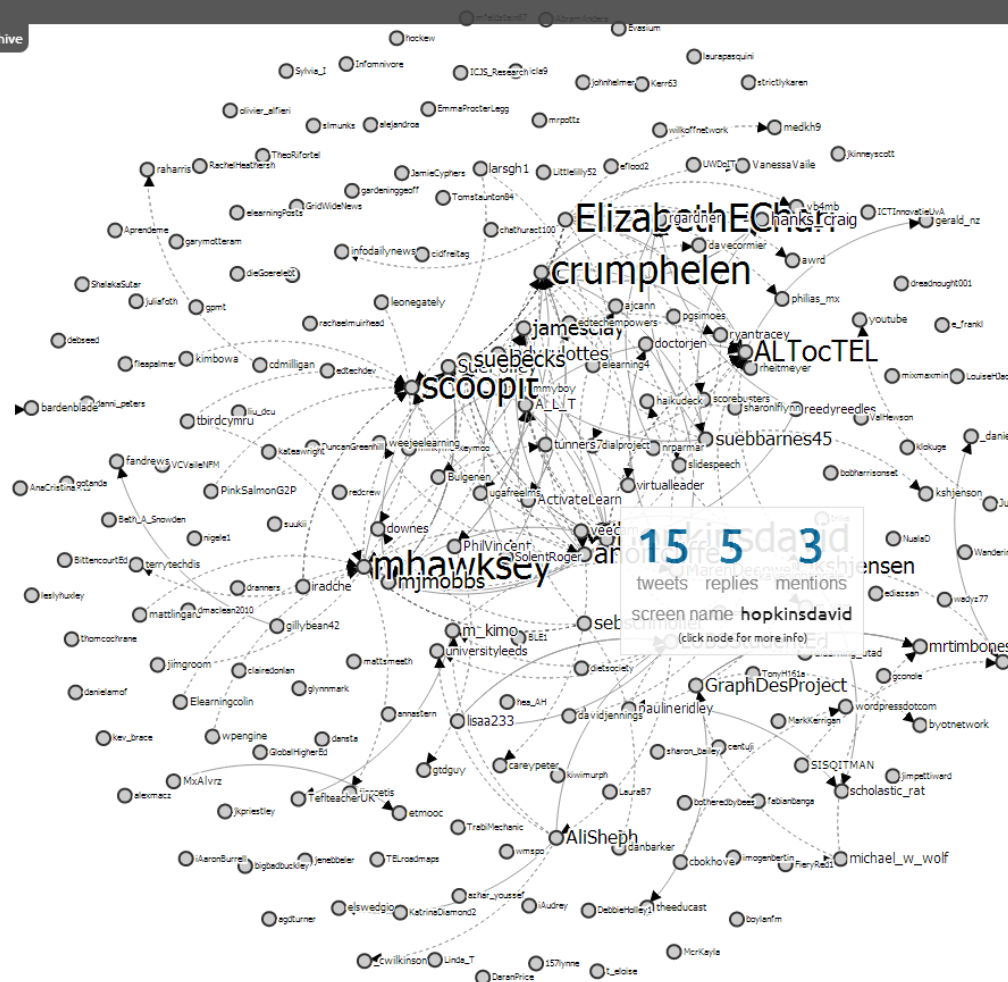
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Martin Hawksey
@mhawksey
mashe.hawksey.info

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Questions!