A Dark Side to Data-Centric Geography? Where are the Reward Systems?
Panel will discuss an apparent disconnect in academia where skills in research computing and programming are still not properly rewarded, and what we can do about it. By not properly rewarding computing and coding, publishing of data, etc. in the same way that we reward traditional research, teaching and service, are we unwittingly driving a host of promising researchers away from the academic community?

Dan Goldberg, TAMU: “As someone coming to a love of geography following 3 degrees in computer science (bs, ms, and phd) this is my daily struggle toward tenure in a dept of geography. I routinely need to explain to my colleagues why computing is part of geography and how what I do is not simply widgetology.”

Similar themes touched on in opening plenary panel on Disruption in Higher Education and NRC Report on Transformative Research
These “Yodas” wrote to me before the AAG to express their interest in the topic and encourage its discussion. Jerry Dobson was actually in the audience with us.
Data Science and Data-Centric Geography

Classic researcher: T-shaped

Modern researcher: Pi-shaped

Breadth of Knowledge

Domain Specialty

Depth of Knowledge

Stats/Computing

Hacking Skills

Machine Learning

Math & Statistics Knowledge

Data Science

Danger Zone!

Substantive Expertise

Traditional Research
What changes in academic culture should we strive toward? What institutional barriers need to be removed?

Recognizing that graduates will go on to work in both academia and industry, how best to prepare them for success in both worlds?

What drivers might shift academia toward recognizing & rewarding “data scientists” in geography?

Whither “data science?” Where does it fit within the structure of the university?

Diversity on the panel
Karen Kemp – part of a spatial sciences institute and not a formal department – equivalent to full professor
Renee Sieber – associate (mid-career) professor with joint appointment in the School of Environment & Department of Geography, McGill
Serge – full professor, School of Geographical Sciences & Urban Planning at ASU but offering separate degrees in those fields
Werner – full professor, Dept of Geography, UCSB, Dangermond Chair, but running the spatial@UCSB institute that serves the entire campus
Forrest – a doctoral student at Texas A&M, student of AAG president Sarah Bednarz, soon to defend and take up a tenure-track post at UMass-Amherst; dissertation deals in part with the topics of this panel
Matt – associate (mid-career) in Dept of geography at U. of Kentucky, visiting scholar at Harvard but in 2 impt units there: center for geographical analysis and visiting prof in Graduate School of Design

From AAG Editorial board meeting of Monday: “A lot to be said for publishing to be part of the conversation in compelling topic rather than just ticking box toward tenure.”
Thank You

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