Data: Unstable in Concept and Context

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Data Stewardship: The Ideal

Data are representations of observations, objects, or other entities used as evidence of phenomena for the purposes of research or scholarship.

Center for Embedded Networked Sensing

- NSF Science & Tech Ctr, 2002-2012
- 5 universities, plus partners
- 300 members
- Computer science and engineering
- Science application areas

Slide by Jason Fisher, UC-Merced, Center for Embedded Networked Sensing (CENS)
Science ↔ Data

Engineering researcher:

“Temperature is temperature.”

CENS Robotics team
Science <-> Data

Engineering researcher: “Temperature is temperature.”

Biologist: “There are hundreds of ways to measure temperature. ‘The temperature is 98’ is low-value compared to, ‘the temperature of the surface, measured by the infrared thermopile, model number XYZ, is 98.’ That means it is measuring a proxy for a temperature, rather than being in contact with a probe, and it is measuring from a distance. The accuracy is plus or minus .05 of a degree. I [also] want to know that it was taken outside versus inside a controlled environment, how long it had been in place, and the last time it was calibrated, which might tell me whether it has drifted.”
Project Timelines
Data Stewardship: The Reality

We just need to migrate the data from these systems to fit into that hole over there.

I'll get the hammer.

Mount Wilson Solar Observatory, 2017


Graduate students

http://gsa.rice.edu/

Post-doctoral fellows

https://med.nyu.edu/our-community/life-nyu-school-medicine/life-postdoc