



# Exploring Visualization Services for UC Berkeley

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Research IT Reading Group  
November 30, 2017



Thanks for coming today!



# Goal for today's discussion

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To foster a set of **community-based** discussions about visualization technologies and services ...

... so that together we can have a significant impact on research, teaching and learning at UC Berkeley



Why is a community approach  
the best way forward?



# What do we mean by “visualization”?

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Across and between disciplines?

In terms of technologies?

In terms of services?

What do researchers, teachers and learners need?

Some examples of visualization

# HearstCAVE

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*An immersive visualization environment  
for UC Berkeley*



# Visualizing Digital Scholarship

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Immersive Scholar: [Announcing Our Partners](#)

Our PIs: Larry Conrad (CIO) and Cathy Koshland (Vice Chancellor Undergraduate Education)

“... to develop extensible models and programs for the creation and sharing of digital scholarship in large-scale and immersive visualization environments.”





# Goals of UCB's participation

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- Partner with the Library and additional campus museums to develop more UCB content
- Keep developing the student team
- Improve software and workflows (Jupyter notebooks, use of HPC cluster, virtual desktop)
- Develop display capability in CollectionSpace portals
- As a community, address issues of preservation, copyright/license issues, RDM, accessibility



# Visualization in the “sciences”

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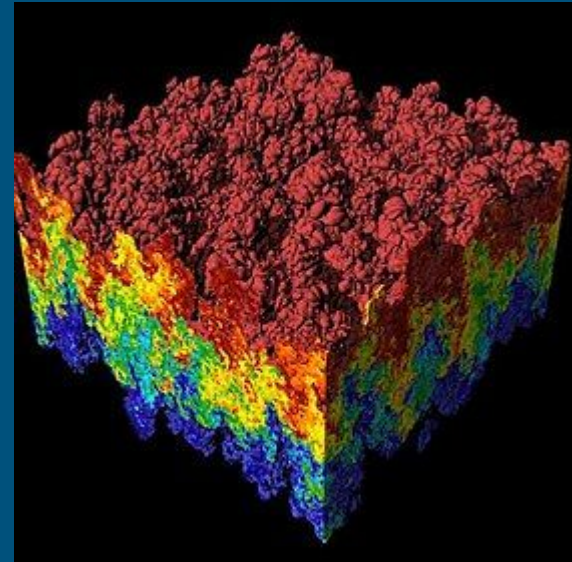
Is visualization something different in Data Science?

Is visualization mainly about building effective figures?

(How) Is visualization in Matlab different from visualization in Tableau?

Reading: “[Scientists need data visualization training](#)”

BIDS Figures Group now forming





# Virtual/Augmented/Mixed Reality

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<http://vr.berkeley.edu>

<http://augcog.berkeley.edu>

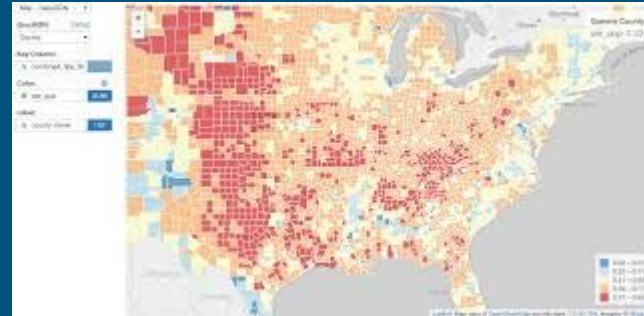
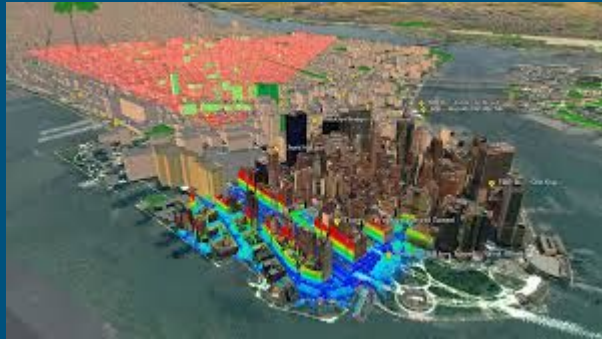


Center for  
Augmented Cognition

VIRTUAL REALITY @ BERKELEY

# What about geospatial visualization?

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# What else is happening on campus?

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- <http://dataviz.berkeley.edu>
  - Partners
- D-Lab Trainings
- ...
- ...

# What else is happening beyond UCB? (e.g., at other universities and other kinds of orgs)

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- ...
- ...
- ...

# How do we characterize viz in different fields?

*With apologies for this categorization (always a flawed but necessary activity)*

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- Humanities:
- Social Sci:
- Physical Sci:
- Bio Sci:
- Chem:
- Engi/CS:
- (continued next slide)



# How do we characterize viz in different fields?

*With apologies for this categorization (always a flawed but necessary activity)*

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- Law:
  - Business:
  - Public Health:
  - Public Policy:
  - Social Welfare:
  - Env Design:
  - ...
  - ...

How then do we define visualization?  
Do we need to?

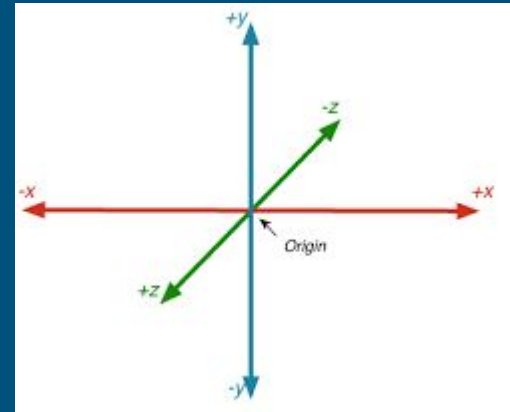
# Can we visualize an n-dimensional framework?

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Domains and communities

Tools (software & infrastructure)

Training, consulting and support



*With apologies: Those are categorical dimensions, not continuous variables*

# What are some steps we can take together?

*Or separately for that matter*

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- ...

Thanks for coming!

Let's talk more about viz in 2018

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