Grassroots Reproducibility: Just Do It!

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Reproducible Visualization Research: How Do We Get There?
VisWeek12 Panel
Reproducibility By Paper Type

- technique / algorithm: yes!
  - video documenting look/feel of interaction
  - code, data, parameters

- evaluation: user/lab studies: yes!
  - all of the above, plus
  - all experimental stimuli (images), not just a few
  - data that you gathered
  - experimental protocol/methods details
Paper Types and Reproducibility

• models, systems: maybe?...

• design studies: reprod. of process not results!
  – highly qualitative work

"The measure of success is not that a different visualization researcher would design the same system, it is that this particular researcher has created something useful.”

Existing Mechanisms Suffice

• supplemental material
  – beyond just video!
  – code, data, parameters, stimuli,...
  – just host on your own web page for paper
    • in addition to centralized conference/journal DL

• no need to wait for culture change
  – funders/publisher mandates
Continuum of Culture

now
soonish
eventually
never!

forbidden
unmentioned
weakly advised
strongly advised
mandated
enforced
High Payoff: Enlightened Self-Interest

• helps you, not just community in general
  – your work will (probably) have more impact
    • citations
    • benchmarks
  – you can reproduce your own work
    • when creating images with latest algorithm for paper
    • when creating comparison images with older alg variants
    • six months after paper for new student followon work
    • years after first author leaves your lab
Just Try It

• easy to change your own process incrementally
  – try something new next time

• the earlier you start, the more you can do
  – ethics approval to release user study data when project starts, long before writing paper
  – makefile-driven figure creation with documented parameter settings best when from day one

• if you go too far, back off
  – hasn’t happened yet, I only regret what I didn’t do!