Scrum, Visualization, and Other Cool Stuff

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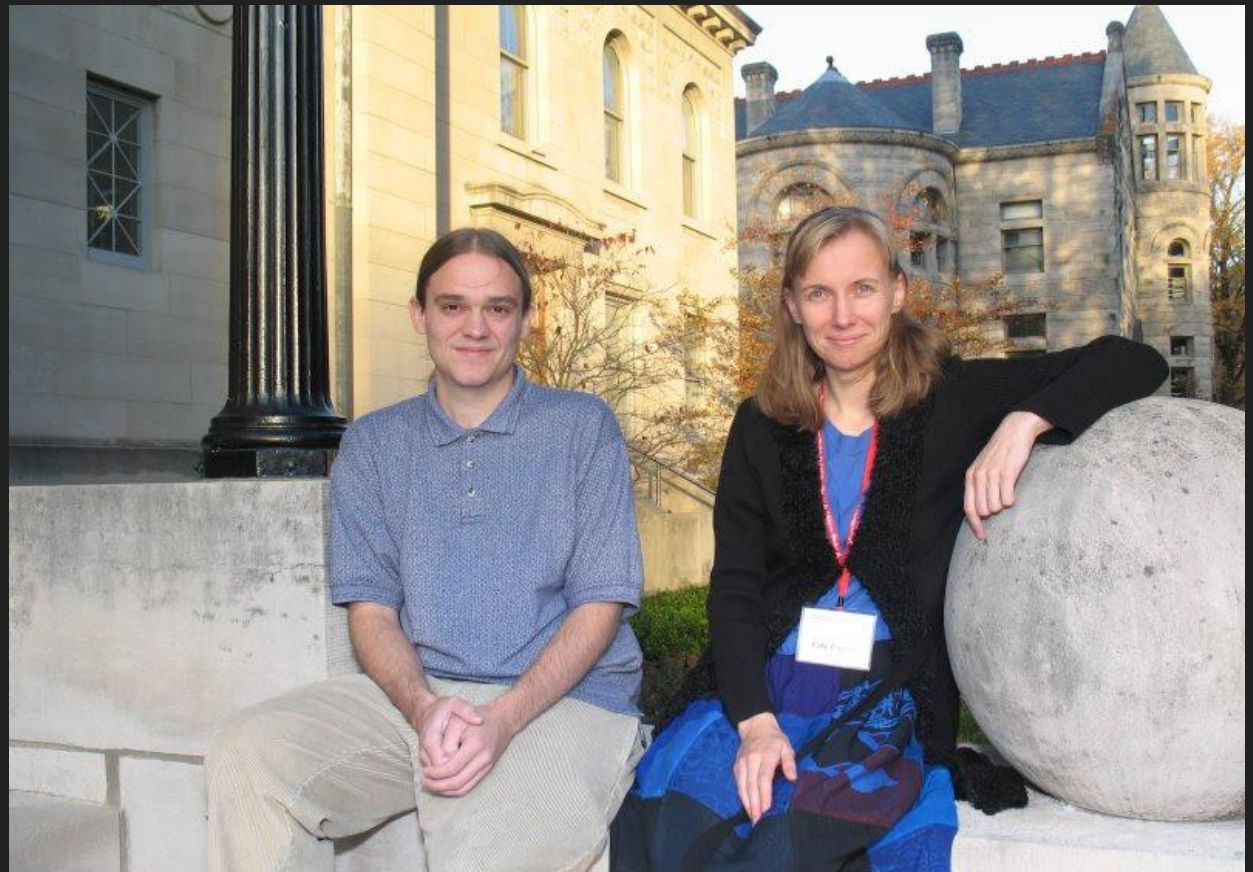
Timeline

- 1999-2004 - BS Computer Science at IU
- 2004-2008 - IV Lab / CNS
- 2008-2017 - ChalkLabs (CTO from 2009-2017)
- Nov 2017 - Back at CNS!

IV Lab, circa 2004

IV Lab, circa 2004

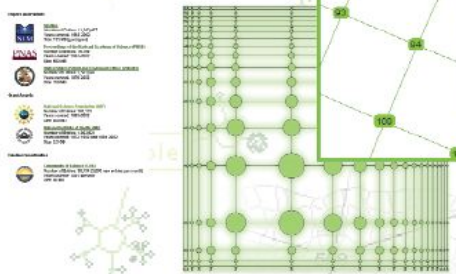


Information Visualization CyberInfrastructure

The InfoVis CyberInfrastructure provides access to data, software code and learning modules as well as computing resources in support of the analysis, modeling and visualization of diverse data sets.

DATABASES

An Oracle database provides access to publications, patents, grants and grant opportunities. The database is continuously and automatically updated. (http://iv.slis.indiana.edu/db)

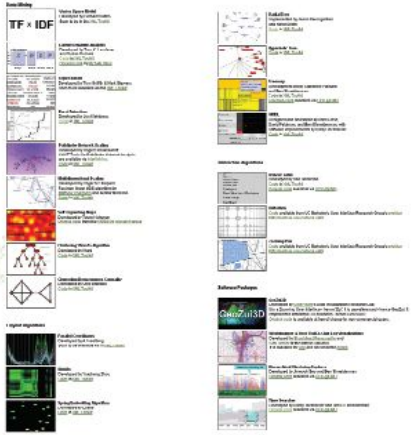


COMPUTING RESOURCES

The InfoVis CyberInfrastructure is hosted at Indiana University's Research Database Complex comprising of two Sun V1280 servers with 12 900Mhz processors and 96 GB of memory each. 6 TB fiber channel disks are attached to both servers. A Sun V880 system with 4 cpus and 8GB memory serves as the web front-end for the database servers. (http://iv.slis.indiana.edu/cr)

SOFTWARE

An open source IVC framework was designed to facilitate the integration of diverse data analysis, modeling and visualization algorithms. New algorithms, data persistence methods, look and feels for the interface and even entire toolkits can be easily "plugged in" or "unplugged". (http://iv.slis.indiana.edu/sw)



LEARNING MODULES

A set of associated learning modules aims to equip learners with a practical skill set by providing code and advice to quickly modify and run different algorithms, test diverse interaction techniques and design features, and to quickly generate and compare information visualizations. (http://iv.slis.indiana.edu/lm)

InfoVis Lab, School of Library and Information Science, Indiana University (2004).
For more information, contact Katy Börner at katy@indiana.edu

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Poster design by Caroline Greenlay, 2004.

CIShell Powered

Tools Portal

Cyberinfrastructure Shell (CIShell)

CIShell supports the plug-and-play of datasets and algorithms and their bundling into custom tools that serve the specific needs of a user group or research community. It has been applied to develop diverse custom tools, see below. Feel free to take plugins from any of these tools to design your personal dream tool.

Visit the CIShell wiki
to learn more about using CIShell as a platform for your tool!

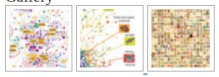
Provided by the Cyberinfrastructure for Network Science Center at Indiana University.

Learn more about existing CIShell-powered tools below.

Network Workbench Tool (NWB)

The NWB Tool supports researchers, educators, and practitioners interested in the study of biomedical, social and behavioral science, physics, and other networks. It comes with a 77-page user manual.

Gallery

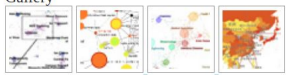


Watch the movie about CIShell-Powered tools on the SciVee: Making Science Visible website by clicking on the image above.

Science of Science Tool (Sci²)

The Sci² Tool was specifically developed for science policy makers and researchers that study science by scientific means. It supports the temporal, geospatial, topical, and network analysis and visualization of scholarly datasets at the micro (individual), meso (local), and macro (global) levels. There exists a 112-page user manual, a continuously updated Sci² Tool wiki, and 24 hours of NIH tutorials in this tool.

Gallery

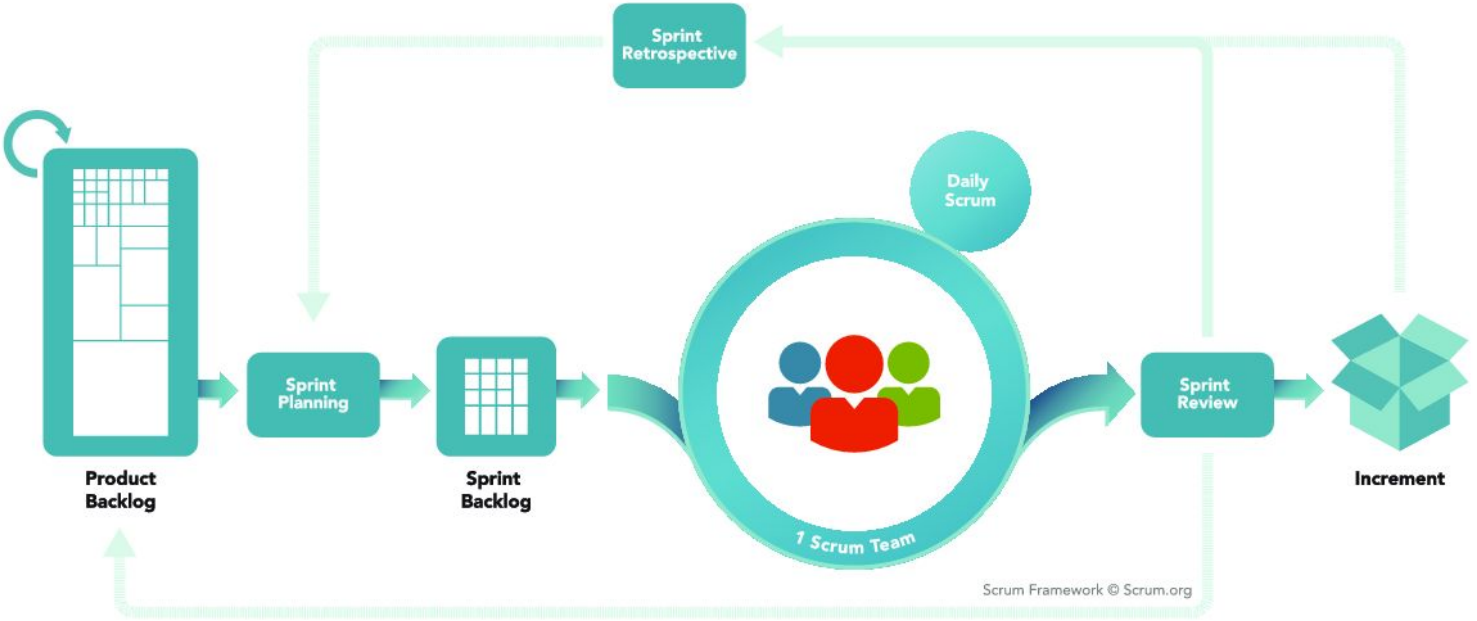


Cool Visualizations I’ve Worked On

- An Emergent Mosaic of Wikipedian Activity
  - http://gigapan.com/gigapans/4277
  - http://gigapan.com/gigapans/4304
  - http://scimaps.org/maps/map/science_related_wiki_49/detail
- IMDB: Movies & Actors
  - http://gigapan.com/gigapans/4306
- Others
  - http://gigapan.com/profiles/bh2/gigapans

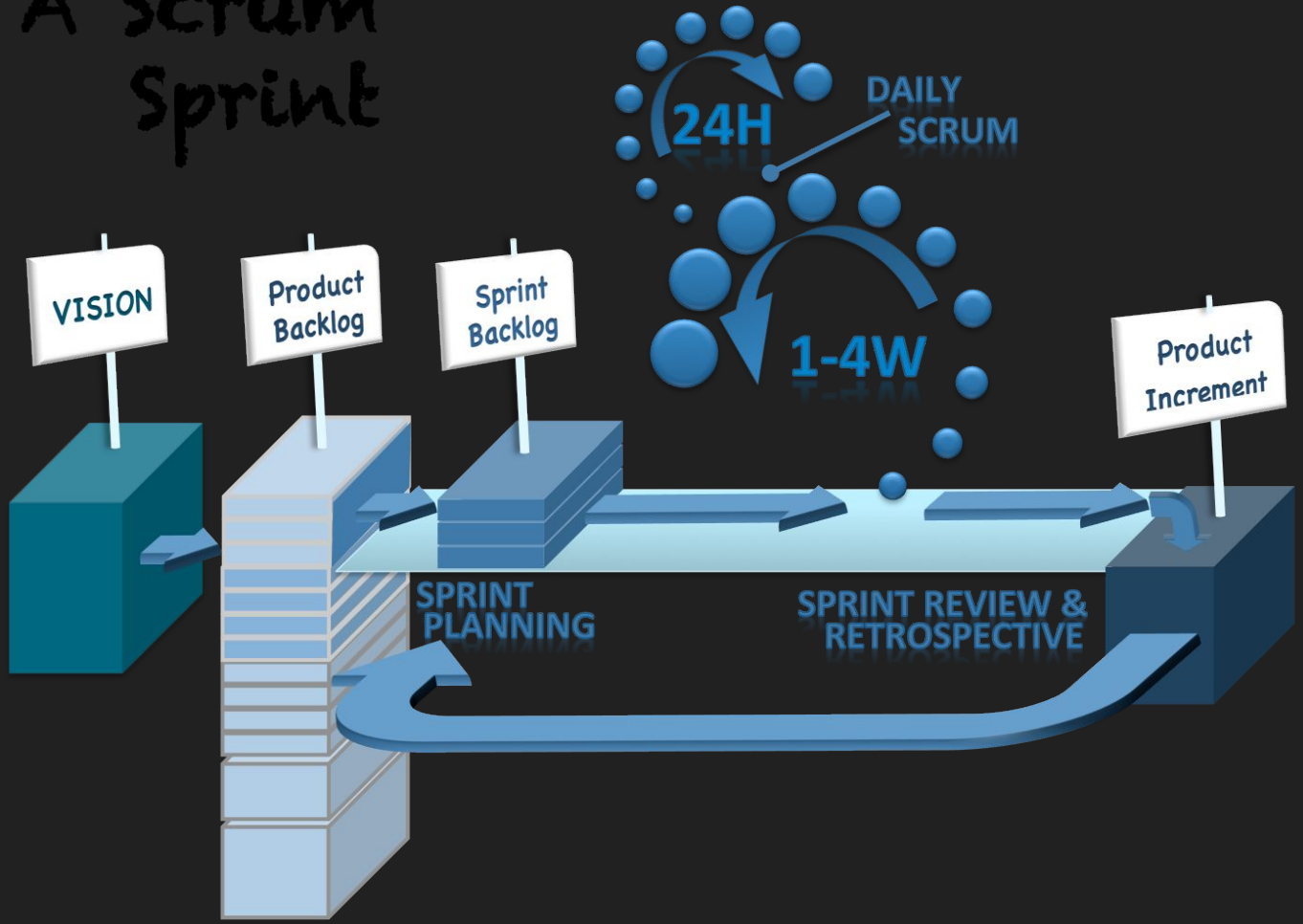
NOTE: I am not a Scrum Expert

SCRUM FRAMEWORK

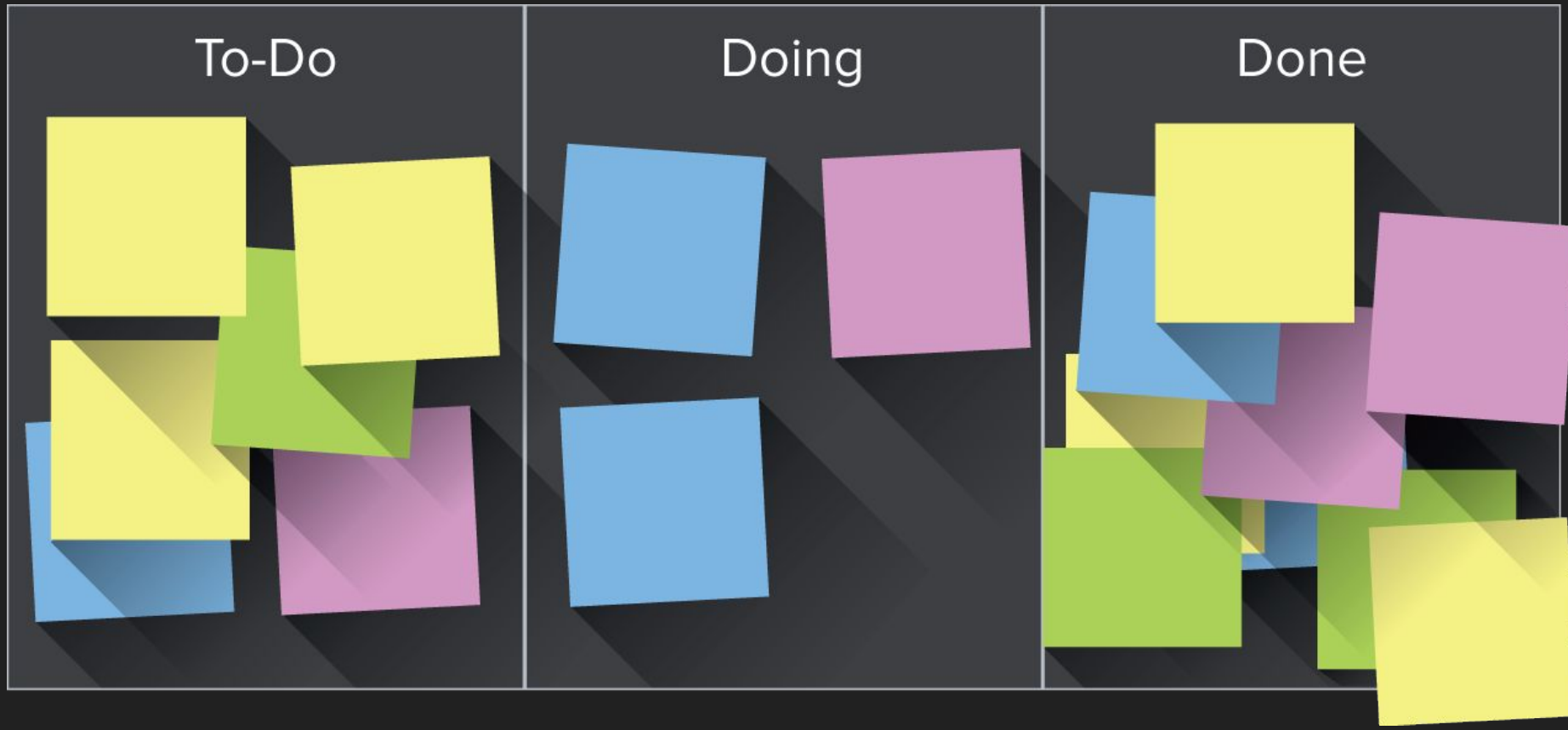


Scrum.org

A Scrum Sprint

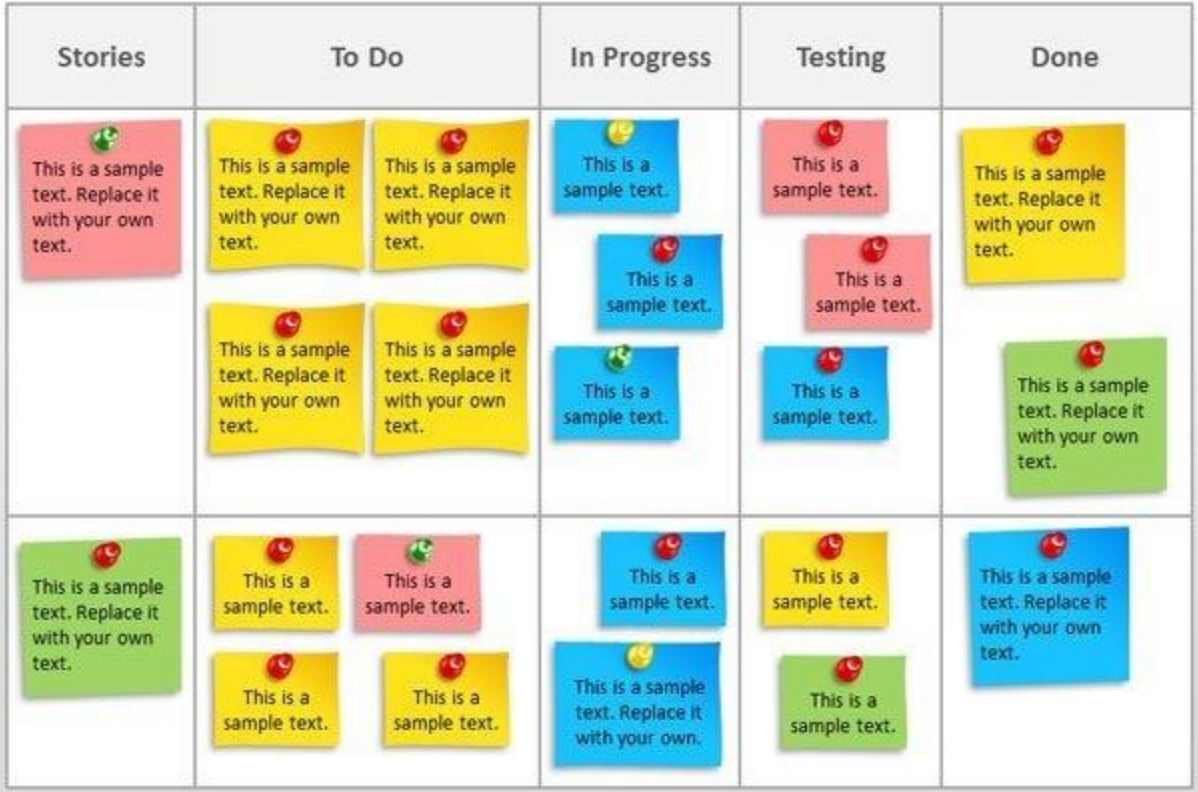


THREE MAIN SCRUM ROLES


To-Do
Doing
Done

Scrum Task Board Template

Company name



How does this apply to Visualization?

- It’s a good way to structure software projects
- Focuses on actual needs of actual users to frame development
- Allows for iterative development
- Deliverables early on helps to steer the visualization to better outcomes

Sample Visualization Projects

- HSD (Health System Dynamics)
  - https://github.com/cns-iu/hsd/projects/1
  - https://github.com/cns-iu/hsd/projects/5
  - https://cns-iu.github.io/hsd/
- AISL (Advancing Informal STEM Learning)
  - https://github.com/cns-iu/aisl/projects/2
  - https://github.com/cns-iu/aisl/projects/6
  - https://cns-iu.github.io/xmacroscope/

Questions / Comments?