Scrum, Visualization, and Other Cool Stuff

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CI for Network Science Center
Timeline

- 1999-2004 - BS Computer Science at IU
- 2004-2008 - IV Lab / CNS
- Nov 2017 - Back at CNS!
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://adis.indiana.edu/citn)

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 TiB fiber channel disks are attached to both servers. A Sun V880 system with 4 pips and 8GB memory serves as the web front end for the database servers. (http://adis.indiana.edu/css)

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://vis.indiana.edu/css)

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 entire toolkits can be easily "plugged in" or "unplugged". (http://voice.indiana.ac/tc)

InfoVis Lab, School of Library and Information Science, Indiana University (2004). For more information, contact Kay Barret at kbarret@indiana.edu

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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.

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.

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 macros (global) levels. There exists a 148-page user manual, a continuously updated Sci² Tool wiki, and 24 hours of NIH tutorials in this tool.
Cool Visualizations I’ve Worked On

- **An Emergent Mosaic of Wikipedian Activity**
  - [http://gigapan.com/gigapans/4277](http://gigapan.com/gigapans/4277)
  - [http://gigapan.com/gigapans/4304](http://gigapan.com/gigapans/4304)
  - [http://scimaps.org/maps/map/science_related_wiki_49/detail](http://scimaps.org/maps/map/science_related_wiki_49/detail)

- **IMDB: Movies & Actors**
  - [http://gigapan.com/gigapans/4306](http://gigapan.com/gigapans/4306)

- **Others**
NOTE: I am not a Scrum Expert
A Scrum Sprint

VISION
Product Backlog
Sprint Backlog

Sprint Planning
Sprint Review & Retrospective

24H Daily Scrum
1-4W
Product Increment
THREE MAIN SCRUM ROLES

- PO: PRODUCT OWNER
- SM: SCRUM MASTER
- ST: SCRUM TEAM
<table>
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<tr>
<th>Stories</th>
<th>To Do</th>
<th>In Progress</th>
<th>Testing</th>
<th>Done</th>
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This is a sample text. Replace it with your own text.
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/1)
  - [https://github.com/cns-iu/hsd/projects/5](https://github.com/cns-iu/hsd/projects/5)
  - [https://cns-iu.github.io/hsd/](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/2)
  - [https://github.com/cns-iu/aisl/projects/6](https://github.com/cns-iu/aisl/projects/6)
  - [https://cns-iu.github.io/xmacroscope/](https://cns-iu.github.io/xmacroscope/)
Questions / Comments?