Jeff Baumes

Kitware, Inc.

Kitware does:

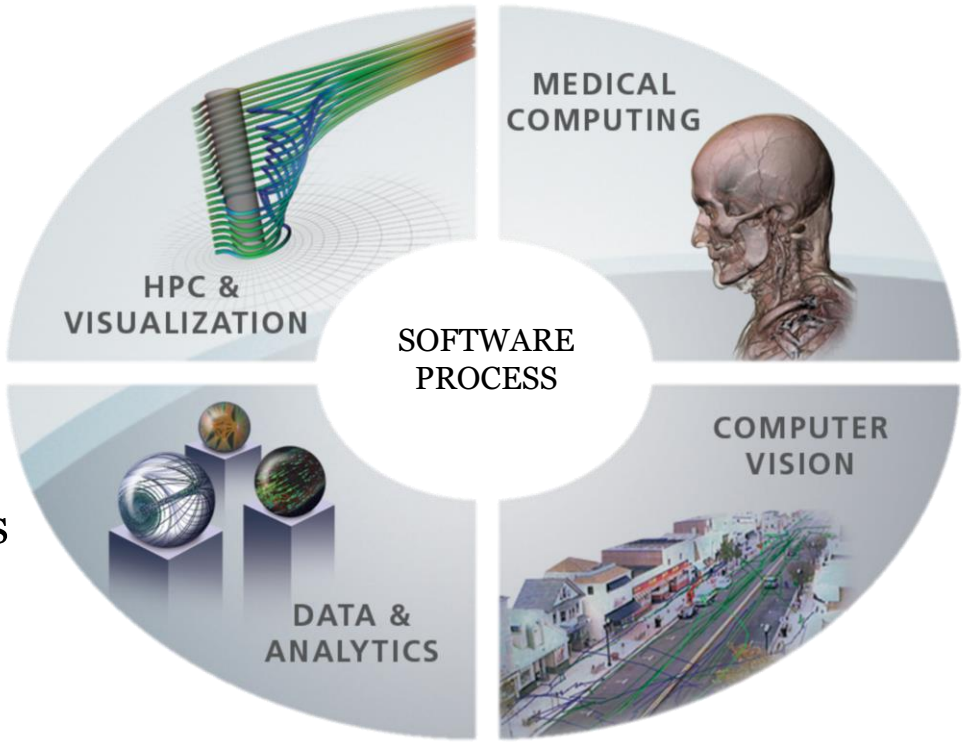
Collaborative software R&D: algorithms & applications, image & data analysis, support & training

Industry, government, academia

Best known for open source toolkits and applications

126 employees: ⅓ masters, ⅓ PhD

Founded in 1998; $28M revenue 2011



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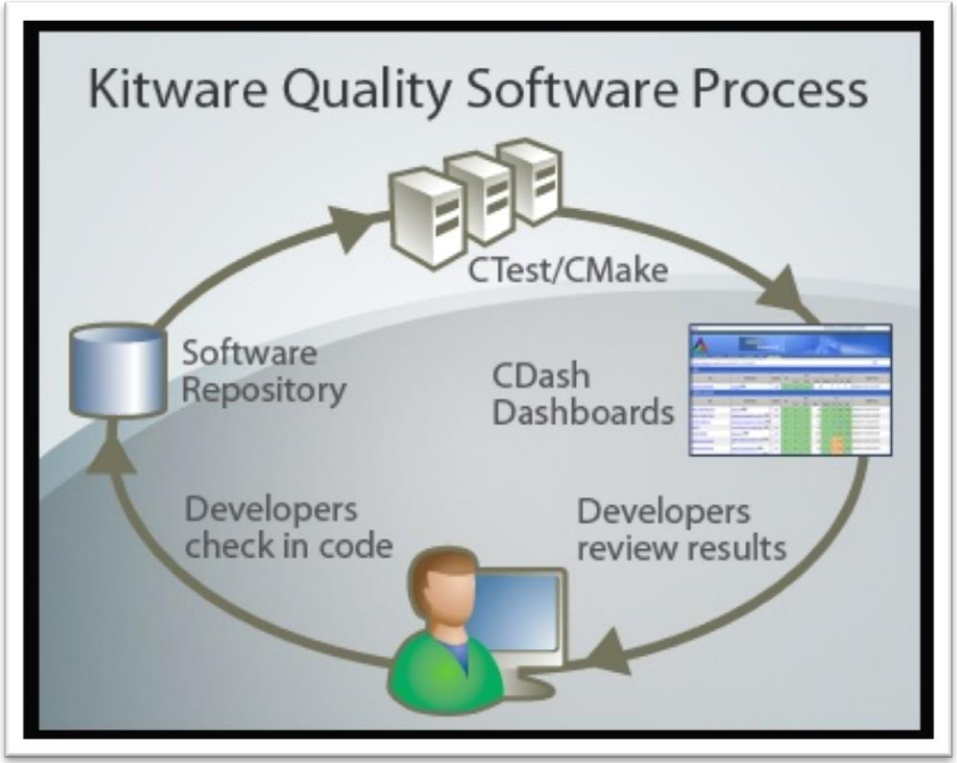
We do software



Experience ranging from small projects to large open-source collaborations

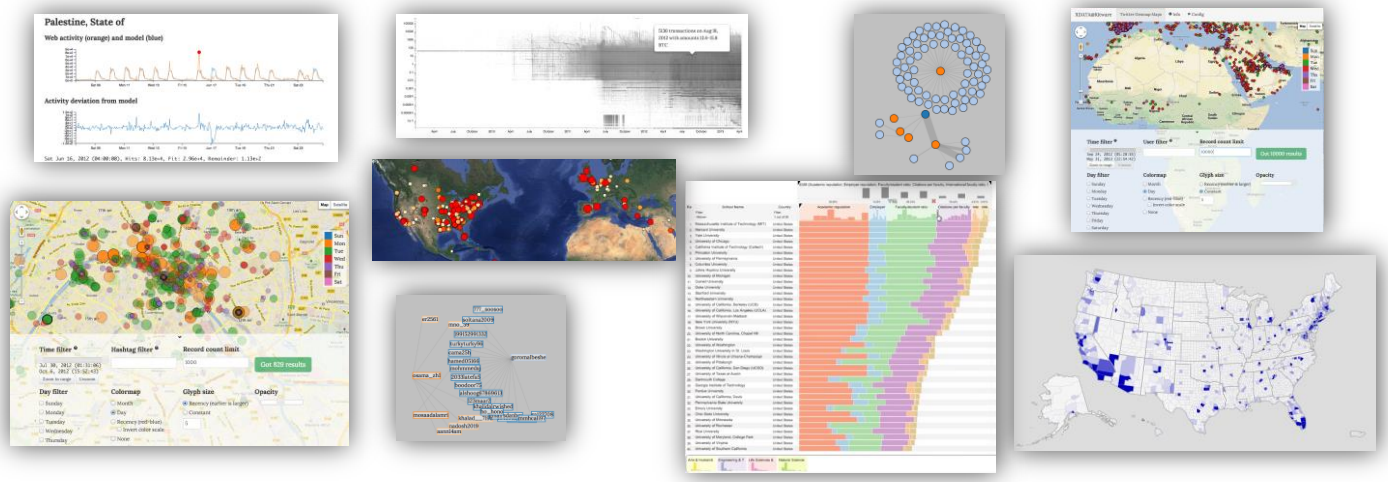
CMake toolset: multi-platform building and testing

Used by thousands of software teams; over 3,000 downloads per day

Rapid visualization design

Tangelo

- DARPA XDATA program
- Working app on big data (server-side processing and querying) with minimal programming



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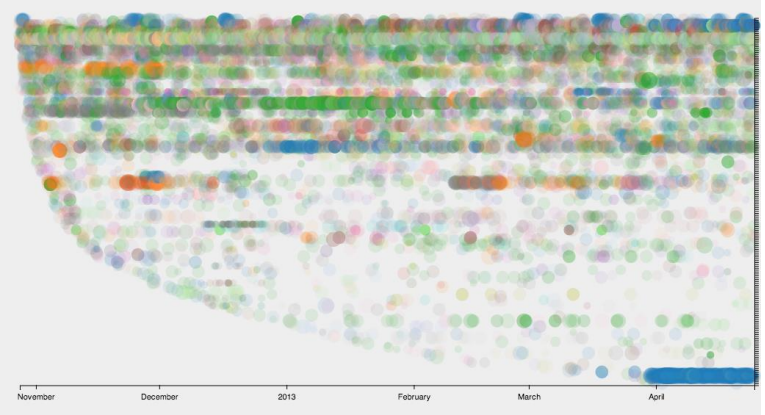
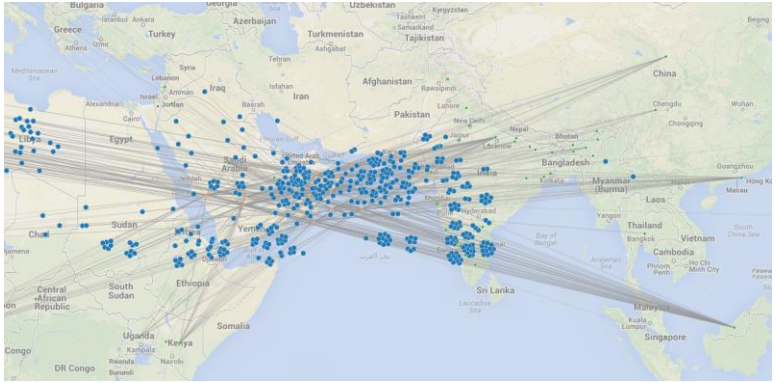
Visualizations for infectious disease

Disease outbreaks by country, over time



Multidimensional partial constraints



DTRA, EcoHealthAlliance, HealthMap, ProMED Mail

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Visualization challenges

- Where is the analytics and visualization symbiosis?
- Can everything crash together in a good way?
- How do we migrate research solutions into practical solutions?
- Organized big data is easy, messy data is hard.

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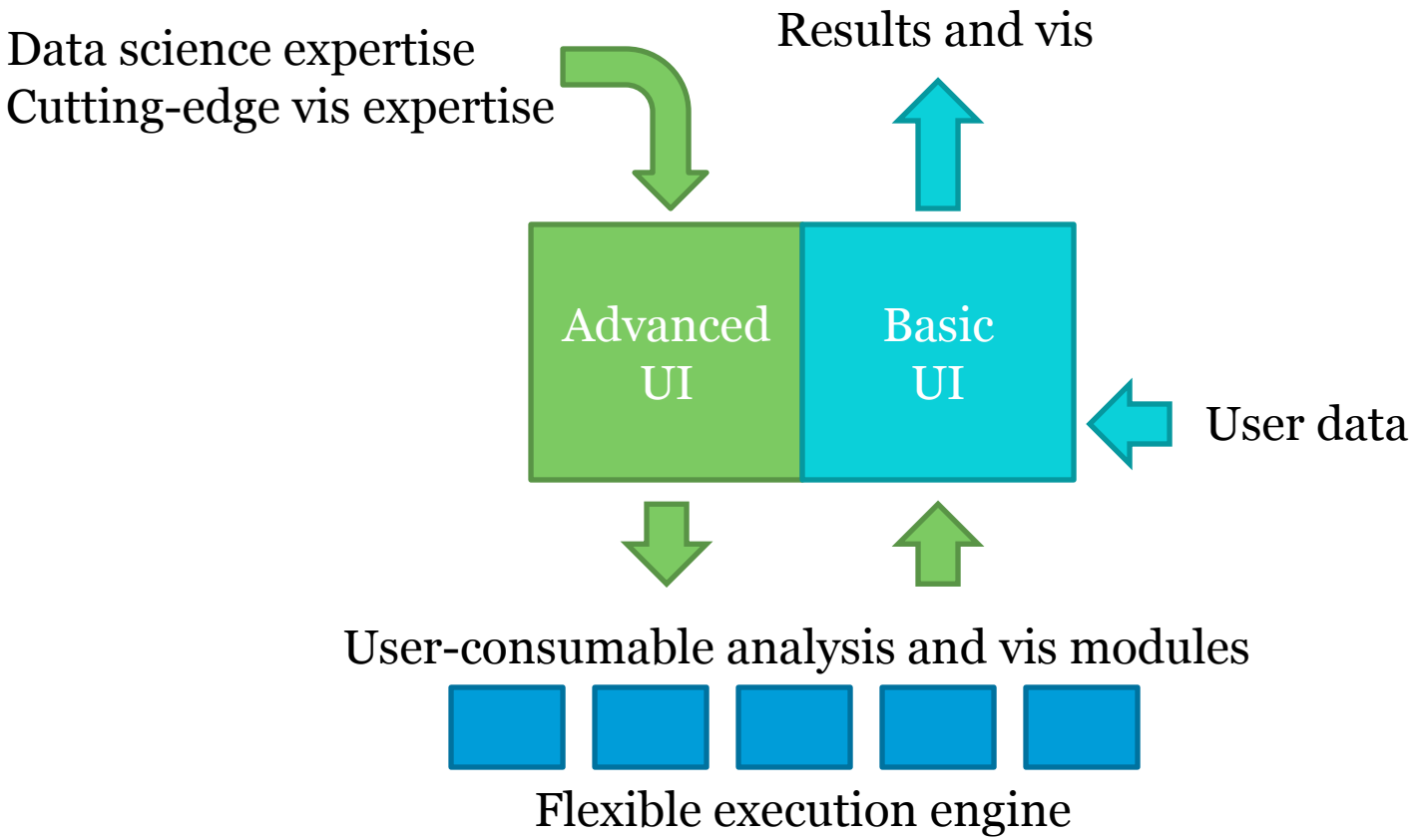
Wish list: “expertise injection”



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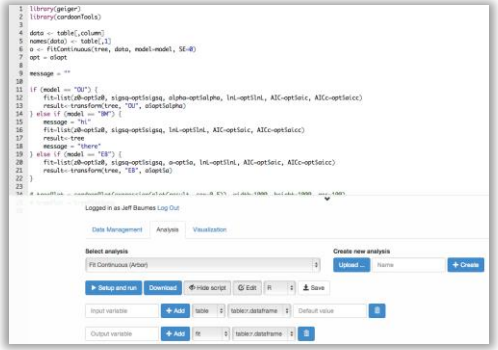
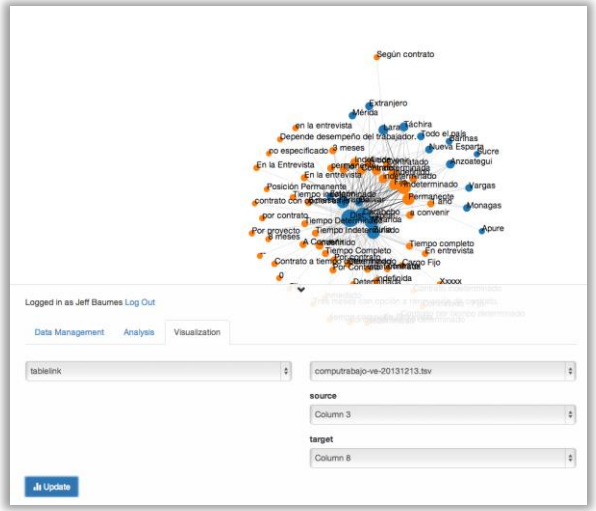
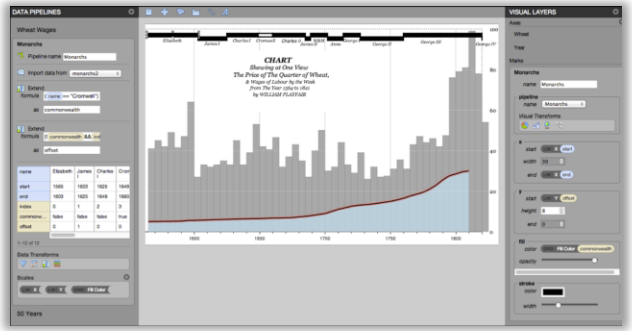


Code editor

Vega (U. Wash), D3, VTKWeb, Tangelo

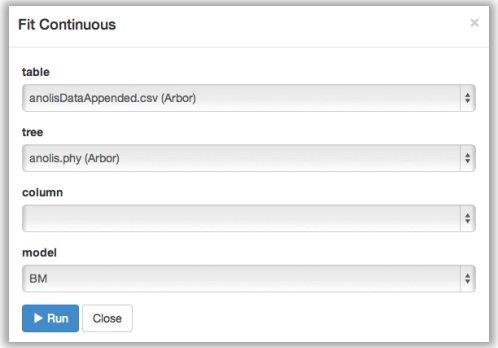


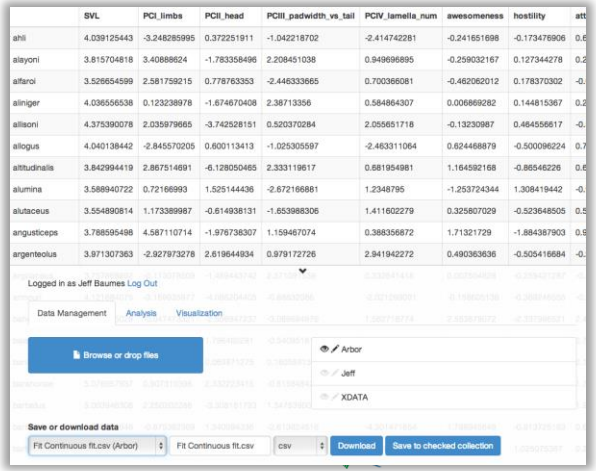


Advanced UI

Basic UI

Lyra vis editor (Stanford)





Romanesco analysis engine