

LAK Dataset Visualization – v2

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Contents

- Research questions
- Possible visualizations
 - Final choice
- Changes in v2
- Demo
- Lessons learned
- Evaluation

Research questions



- Target:
 - Researchers
 - Conference organizers
- Questions:
 - What subjects are discussed during this conference? (keywords)
 - What other organizations are researching a certain subject?
 - How do conferences evolve over time?
 - How do conferences compare to each other?

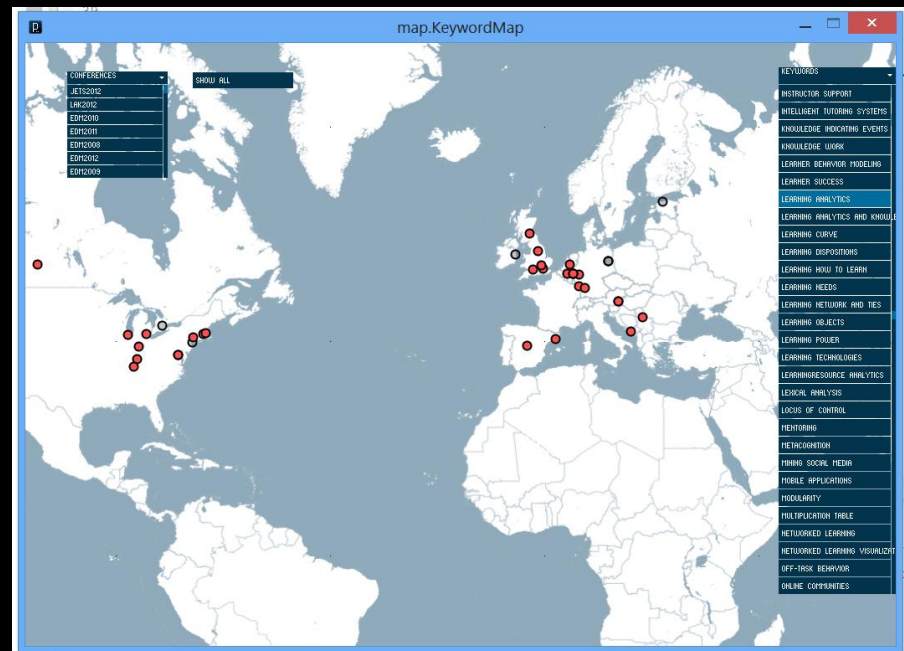
Possible visualizations

- Common-paper map
 - Our original idea
 - Edges indicate joint research papers between orgs
 - Thickness indicates amount of common papers



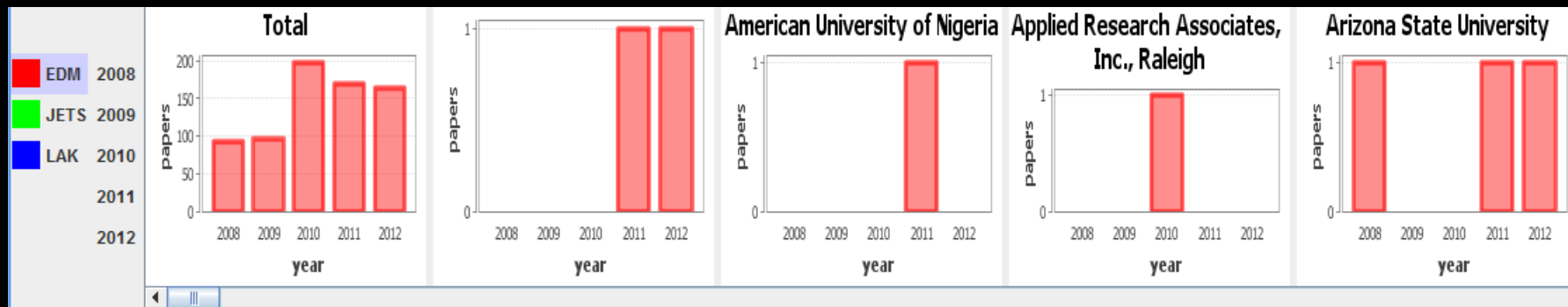
Possible visualizations

- Keyword map
 - List of keywords
 - Show subjects of conference
 - Show orgs of subject
 - Show subjects of org



Possible visualizations

- Barcharts to show:
 - Evolution of #papers conference over time
 - Evolution of #papers of org over time



Possible visualizations

- Aggregate universities to countries when zoomed out far enough



Final choice

- BarCharts + aggregate + common-paper map merged
- KeywordMap separate
 - Keep it that way

Changes in v2 – Barchartmap

- Cached file provider added for performance
- Used different colors just for distinctness
 - Red color less flashy

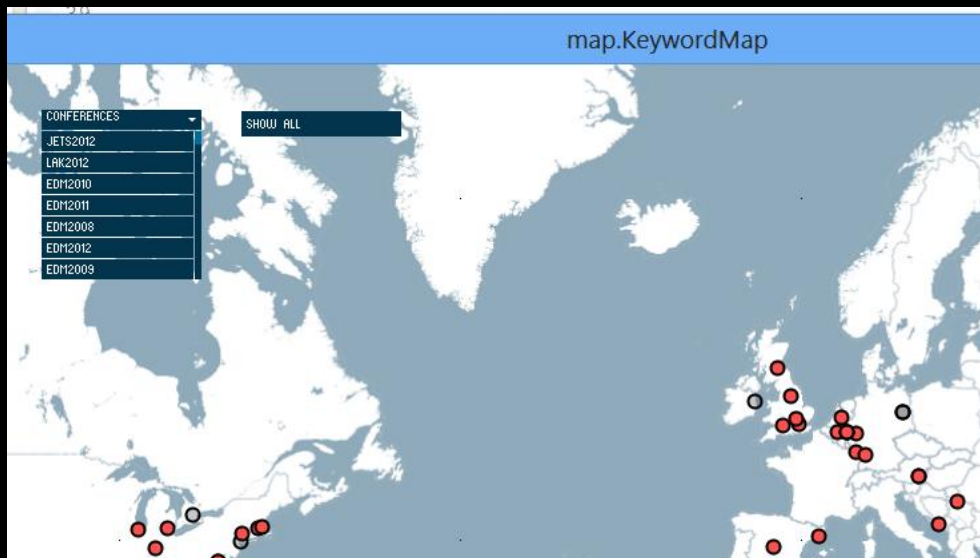


v1

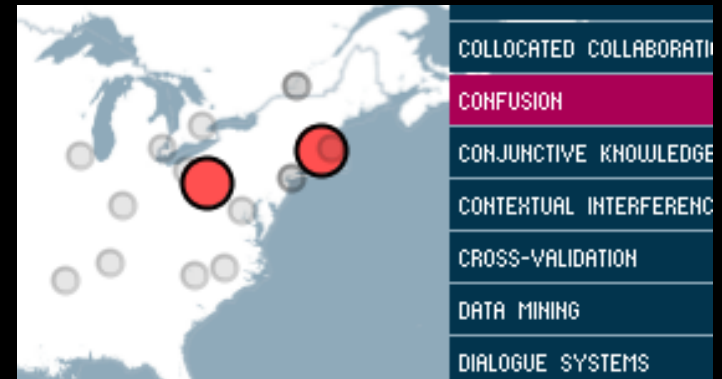
v2

Changes in v2 - Keywordmap

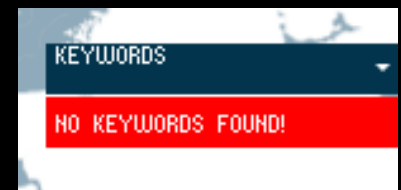
- Fixed some selection bugs
- Lists now show what is selected
- Made it more obvious what organisations are highlighted
- Indication when no keywords were found



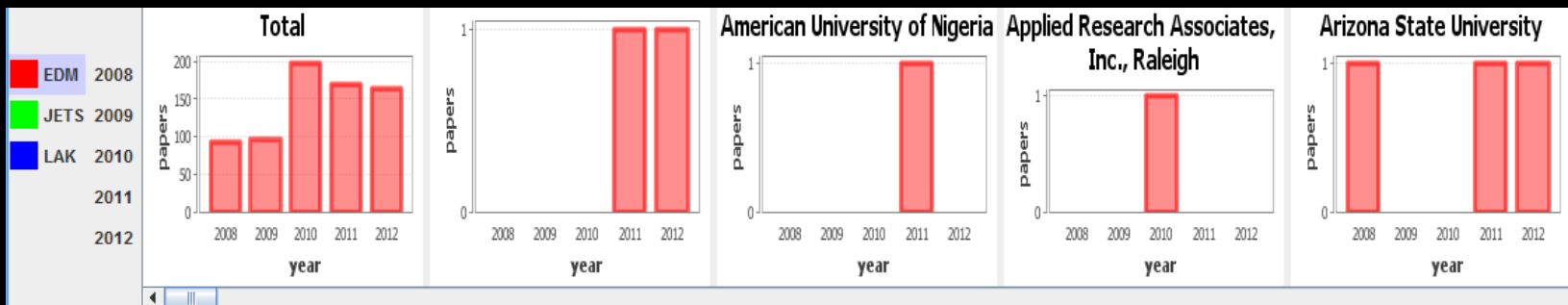
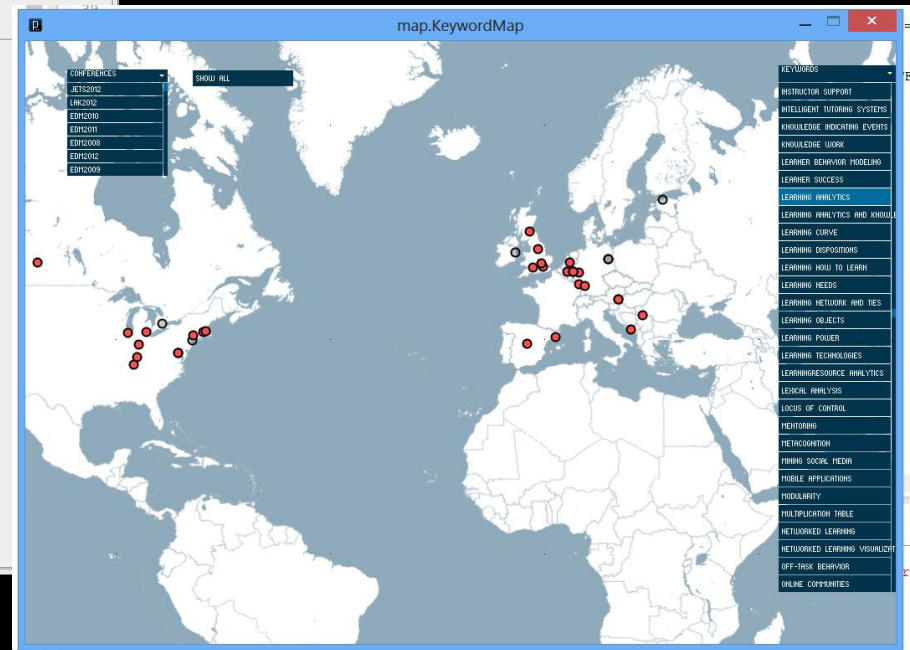
V1



V2



Demo



Lessons learned

- The hardest part is looking for good questions to ask (with an interesting result or story)
- ControlP5 does the trick but is far from ideal
- It's easy to get 'something' visualized, but it's hard to get all the details right

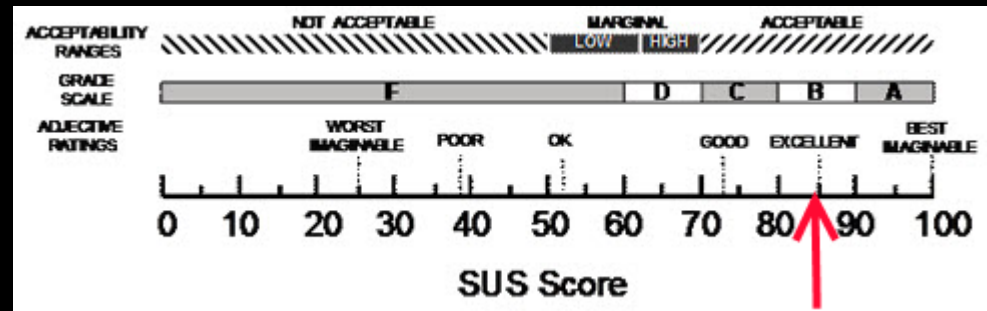


Lessons Learned

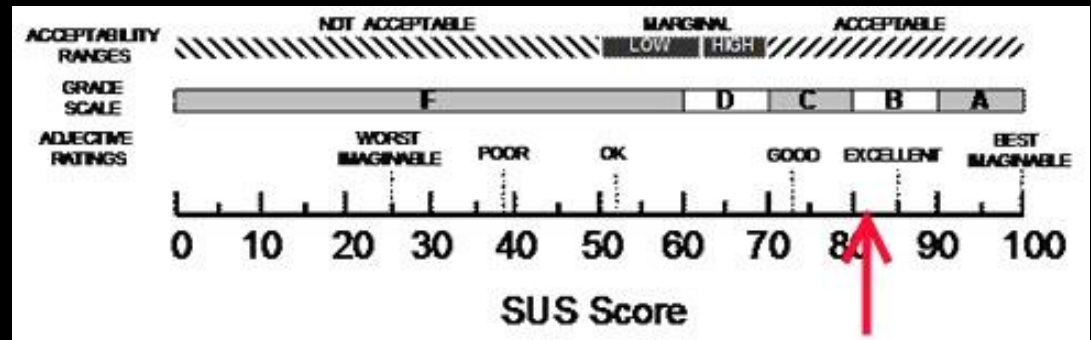
- recognize mistakes
- observe what works
- document them
- share them

Evaluation

- Keywordmap
– 84.17



- Barchartmap
– 80.83



Changes in v3 – Barchartmap

- Added required user interaction
 - When a bar chart is clicked, the map pans to the corresponding organization/country
 - When an organization is clicked, the bar charts panel scrolls to the corresponding bar chart