

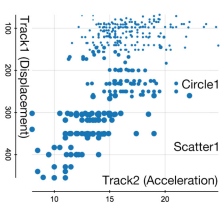
Other Vis Tools

Alex Bigelow, University of Utah
Some slides borrowed from Vadim Ogievetsky, Stanford

Vis without programming

iVisDesigner

Lyra / Vega



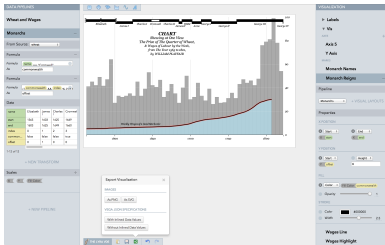
Objects

- Circle1 *Circle*
- Scatter1 *Scatter*
- Track2 *Track*
- Track1 *Track*

Properties of "Circle1"

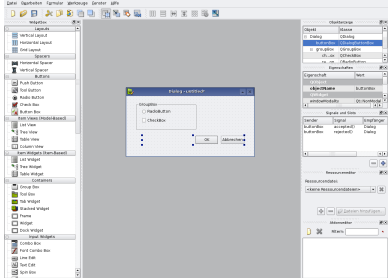
Shape

- Path \uparrow [cars]
- Center Scatter1 *Scatter*
- Radius 1 \uparrow -4 \downarrow
- 3 \uparrow -8 \downarrow
- Linear ∇
- \uparrow [cars]:cylinders



Vis programming: Qt

-QtDesigner

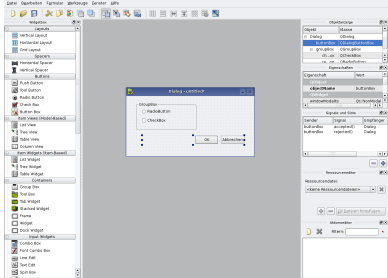


Vis programming: Qt

-QtDesigner

-QGraphicsView
(feels a lot like Processing!)

-QWebView
(can embed D3!)



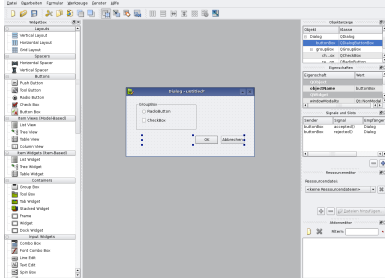
Vis programming: Qt

-QtDesigner

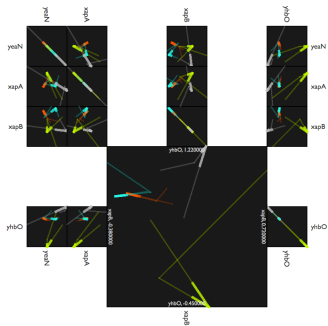
-QGraphicsView
(feels a lot like Processing!)

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(can embed D3!)

C++, but has other
language bindings
(Python: pyside)



draC mutant
recA mutant
topA mutant
wild type



Load Data...

yhbO

Remove

Time (h)

Speed (ultra)

Quit

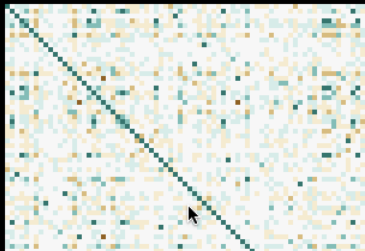
Vis programming: Python

-pyside

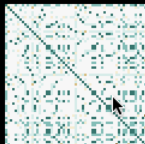
Vis programming: Python

-pyside

-PyGame



om: 4.000000 Threshold: 0.500000 Correlation: -0.260643



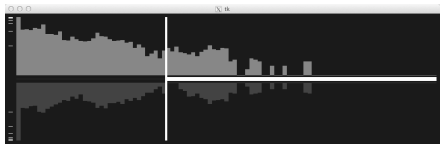
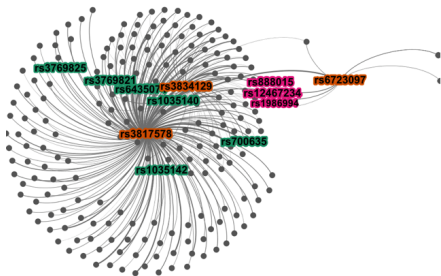
om: 2.000000 Threshold: 1.000000 Correlation: 1.000000

Vis programming: Python

-pyside

-PyGame

-tkinter



Vis programming: Python

-pyside

-PyGame

-tkinter

-tangelo



Vis programming: D₃

Vis programming: D₃

- Why didn't we use it for the class?

Vis programming: D3

- Why didn't we use it for the class?

Web technologies

Vis programming: D₃

- Why didn't we use it for the class?

HTML

Web technologies

Vis programming: D3

- Why didn't we use it for the class?

HTML

SVG

Web technologies

Vis programming: D₃

- Why didn't we use it for the class?

HTML SVG
XML namespace nuances...

Web technologies

Vis programming: D3

- Why didn't we use it for the class?

HTML SVG
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Web technologies
CSS

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client vs. server crap...

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client vs. server crap...
php

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client vs. server crap...
php
python (tangelo, cherryPy, django...)

Vis programming: D3

- Why didn't we use it for the class?

HTML SVG
XML namespace nuances...

Web technologies
CSS

client vs. server crap...
php
python (tangelo, cherryPy, django...)
Dropbox

Vis programming: D3

- Why didn't we use it for the class?

HTML SVG
XML namespace nuances...
Web technologies
CSS

**deep understanding
of javascript**

client vs. server crap...

php

python (tangelo, cherryPy, django...)

Dropbox

Vis programming: D3

The Document Object Model (DOM)

```
<div id="bill" class="cool">  
  <span>Hi, there!</span>  
</div>
```

Tree of tags with attributes

Check out developer tools...

Vis programming: D3

CSS selectors

```
<div id="bill" class="cool">  
  <span>Hi, there!</span>  
</div>
```

```
<style>  
  .cool { color: #f00ba4; }  
</style>
```


Vis programming: D3

CSS selectors

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Vis programming: D₃

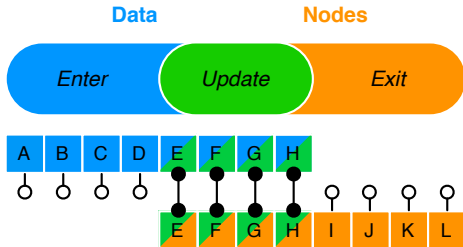
D₃ selections

Interactive D₃ Intro

<http://vadim.ogievetsky.com/IntroD3/#7>

update vs enter() vs exit()

these are **separate** D3 selections!



D3: Lots of built-in goodies

- transitions
- scales (color, spatial)
- geography
- time
- layout algorithms
- interaction

Hanpuku:

D_3 + Illustrator!