

CACA - Course Adjusting Collision Avoider



Markus Fellidin
fellidin@kth.se



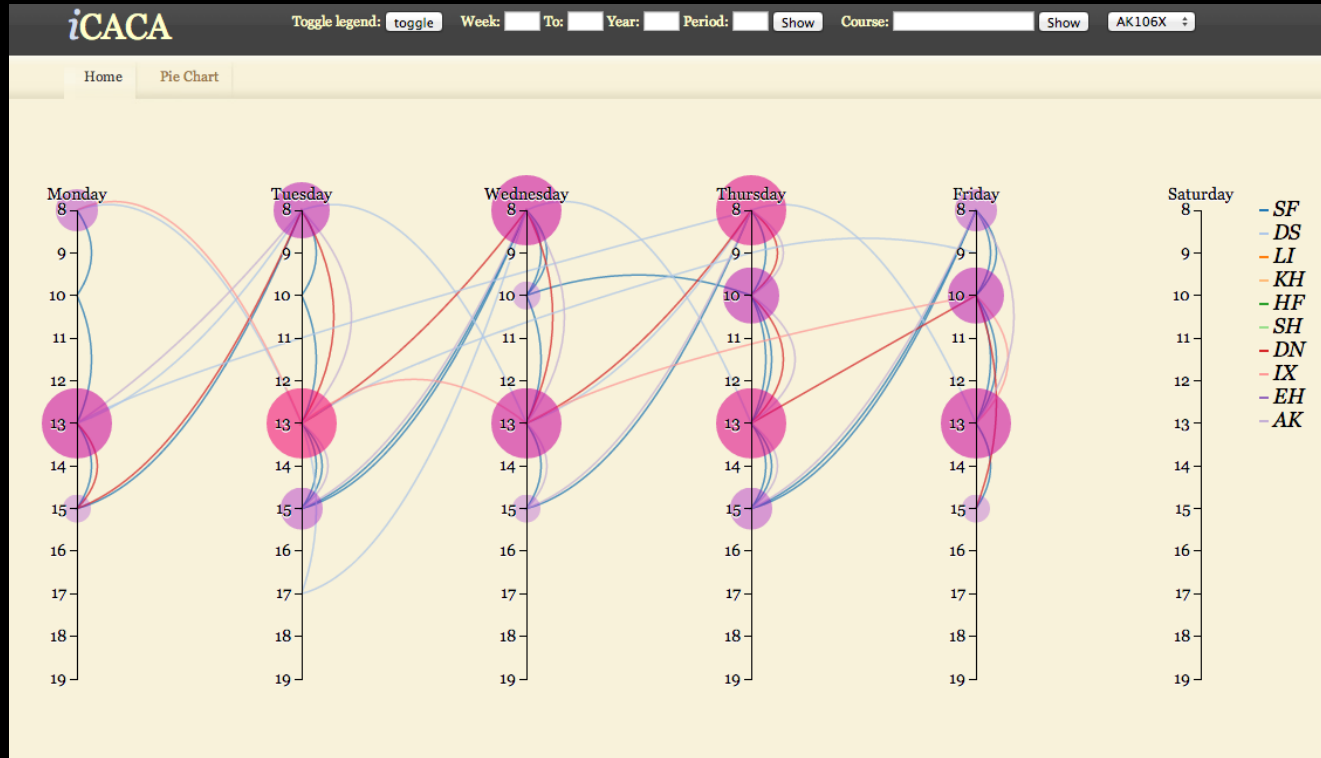
Max Roth
maxroth@kth.se

Information Visualization

DH 2321

2013/03/04

CACA - Course Adjusting Collision Avider



March 4, 2013

CACA

Motivation

- Parallel coordinates in a new light using new techniques
 - Time vs. Time
 - Interaction with several live API's
 - Potentially a very useful planner
- A new take on a known tool to reinvent a classical visualization
 - The calendar is perhaps one of the oldest visualizations
 - Is there a better way to view certain aspects?
- Thinking outside the box and learning to use trending tools in a live environment
- How a known tool can be applied in a non-traditional way and the power of D3.js
 - Perhaps what to do/not to do
- Lack of time and tight deadlines mean that quick information is crucial
- How does this project make the world a better place?

Goals and Challenges

- Goals
 - Rethink an age-old visualization
 - Utilize the KTH API and its data
 - Some practice with javascript
- Challenges
 - Lack of time and in some aspects, our own limitations
 - How do we use the API?
 - Code and hack, code and hack!

TimeEdit

TimeEdit

Vecka 31 - 50 2012

[Textformat](#)
[Utskriftsvänlig version](#)

Kurs DD2440

Avancerade algoritmer

Kurs A111YA

Introduktion till Arkitekturket

Kurs DD3015

Introduktion till programmering med GPGPU och användning för ve

Kurs DH2320

Introduktion till visualisering och datorgrafik

Kurs EQ1210

Introduktion till signalteori

Kurs AK2017

Introduktionskurs i forskningsetik

Vecka 35 2012	Måndag 27 aug	Tisdag 28 aug	Onsdag 29 aug	Torsdag 30 aug	Fredag 31 aug	Lördag 1 sep
08						
09						
10		10:00-12:00 DH2320 DH2320H121 Fri E31				
11						
12						
13	13:00-15:00 EQ1210, EQ1220 EQ1220H122 Fri Q36			13:00-15:00 EQ1210, EQ1220 EQ1220H122 Fri V34		
14				15:00-17:00 EQ1210, EQ1220 EQ1220H122 Fri Ovn Q24, Q26	15:00-17:00 DH2320 DH2320H121 Fri 5V3Vit, 5V4Mag	
15						
16						
17						
18						

Vecka 36 2012	Måndag 3 sep	Tisdag 4 sep	Onsdag 5 sep	Torsdag 6 sep	Fredag 7 sep	Lördag 8 sep
08	08:00-10:00 EQ1210, EQ1220 EQ1220H122 Fri Q34					
09						
10						
11						
12						
13	13:00-15:00 EQ1210, EQ1220	13:00-15:00 DH2320			13:00-15:00 EQ1210, EQ1220	

March 4, 2013

Methods and Techniques

- This project was coded using D3.js (and some ordinary Javascript)
- The development was performed on Mac's and PC's
 - The project is accessible from almost all platforms with a browser (even mobile)
- The D3.js library is used as an online source
- Html, CSS and Javascript to bind everything together
- The import functions used, a new view of an old problem and some of the filtering implemented
- Details on Demand, filtering, live selections, highlighting, searching, and visual cues
- Several new algorithms for solving Time vs. Time plotting issues and collision visualizations

Live DEMO

Our experience of this project

Difficulties

- D3.js and its usage
- Javascript can be deceptive
- Plugin compatibility

Solutions

- Cowboy coding (the one true way)

Conclusion

- We created a visualization of the courses in a smaller space than anticipated
- We used the KTH API (although not to its fullest potential).
- We learned D3.js and its magical abilities
- In the future: more practice!

Thank you!

Questions?

Max Roth {maxroth@kth.se}

Markus Felldin {felldin@kth.se}

Mario Romero {marior@kth.se}