

ITS – Homework assignment

2016. September 15.

Work schedule

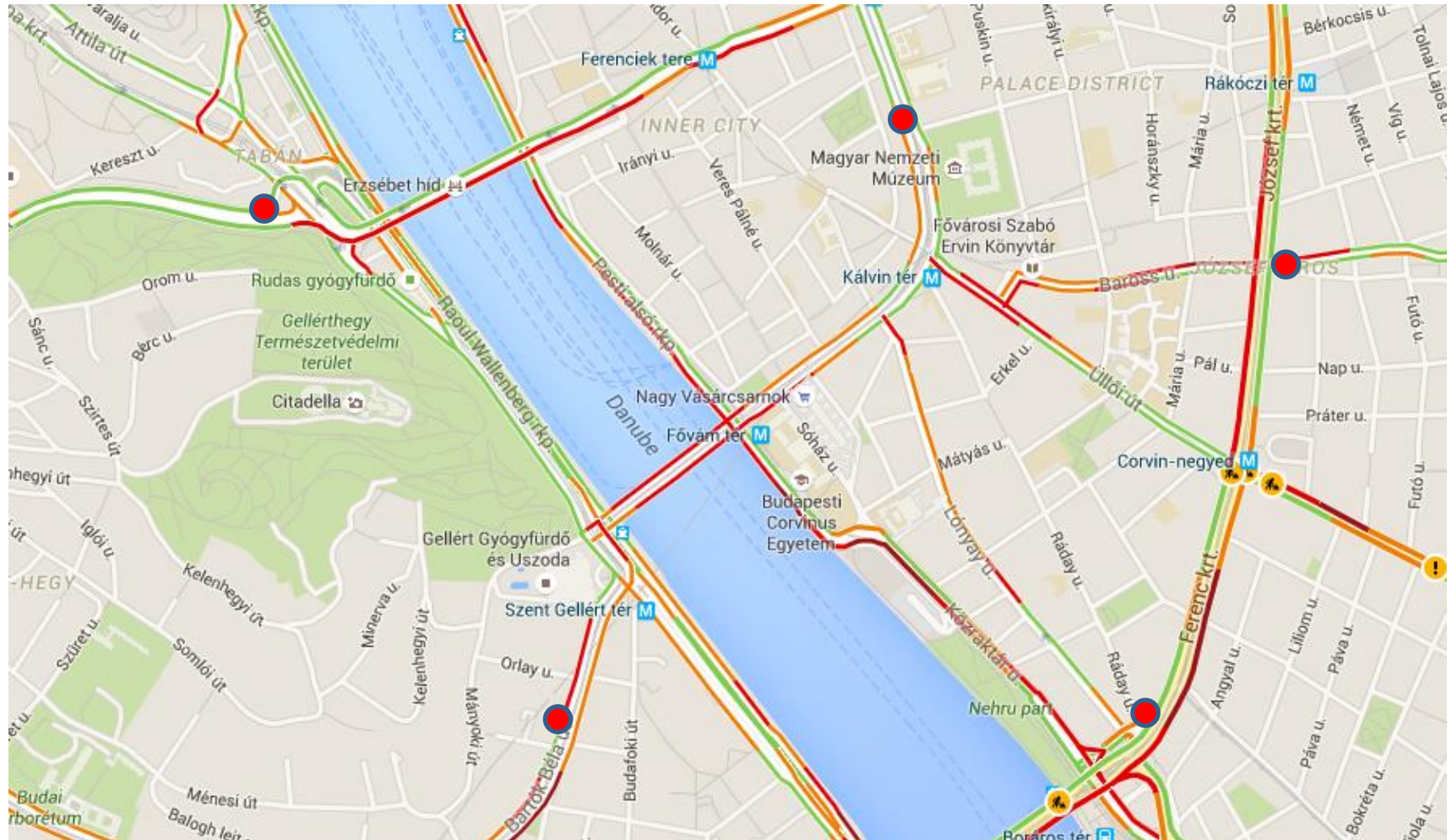
- Groups of 3+-1 students
- 1 topic, teamwork, split the task among the 3 group members
- Status reports every 2-3 weeks
 - Idea, scenario
 - Technology, API
 - First version (aka midterm checkpoint)
 - „Demo“

Menu

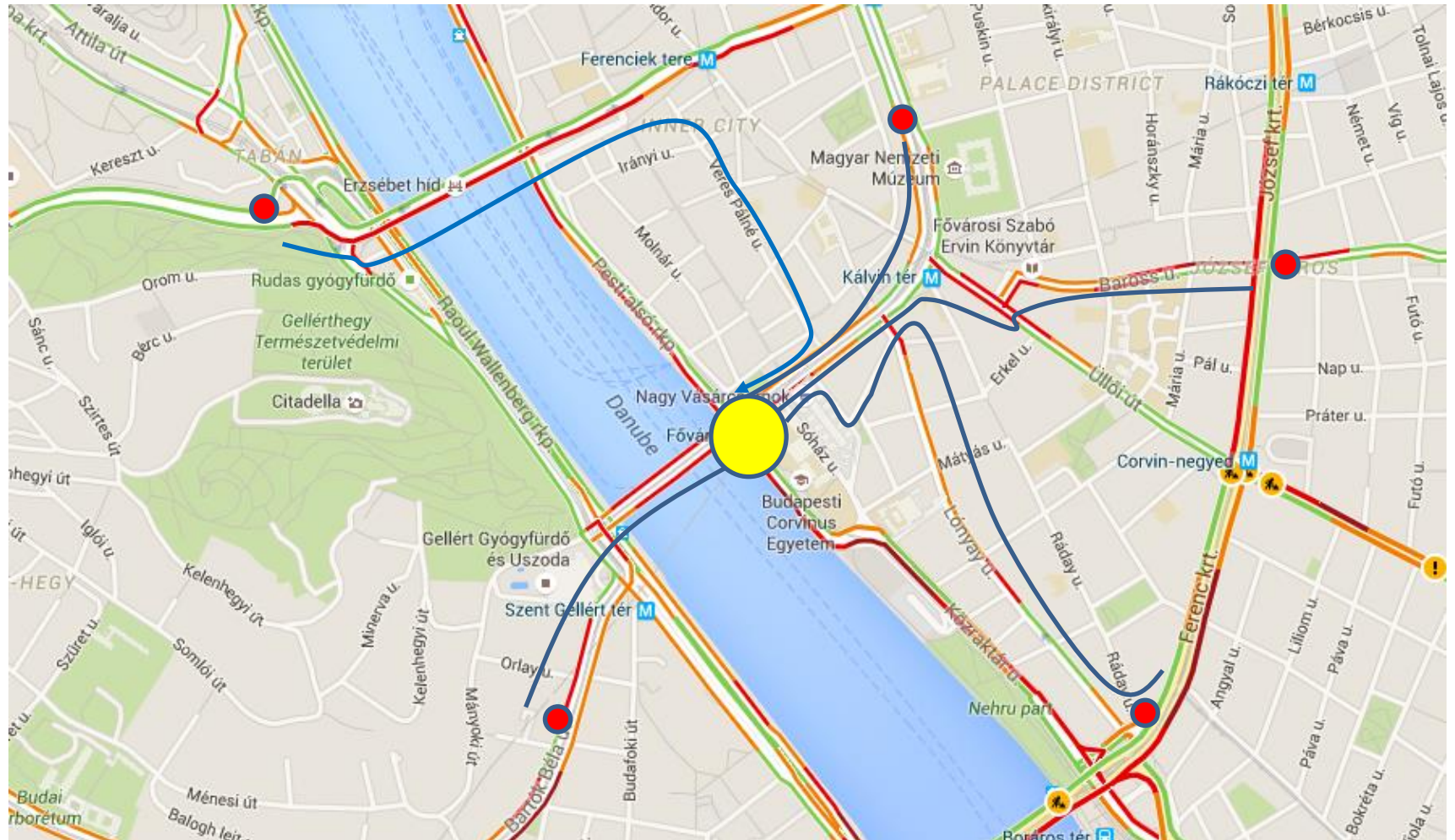
- When should we start? planner
- Meeting-point planner
 - Technologies: Futár, Waze
- Traffic simulations
- Smart parking – demo
- Robot football – demo
- OBD II interface....
- * - khm, own startup idea

**WHEN SHOULD WE START?
PLANNER**

Different starting position and time



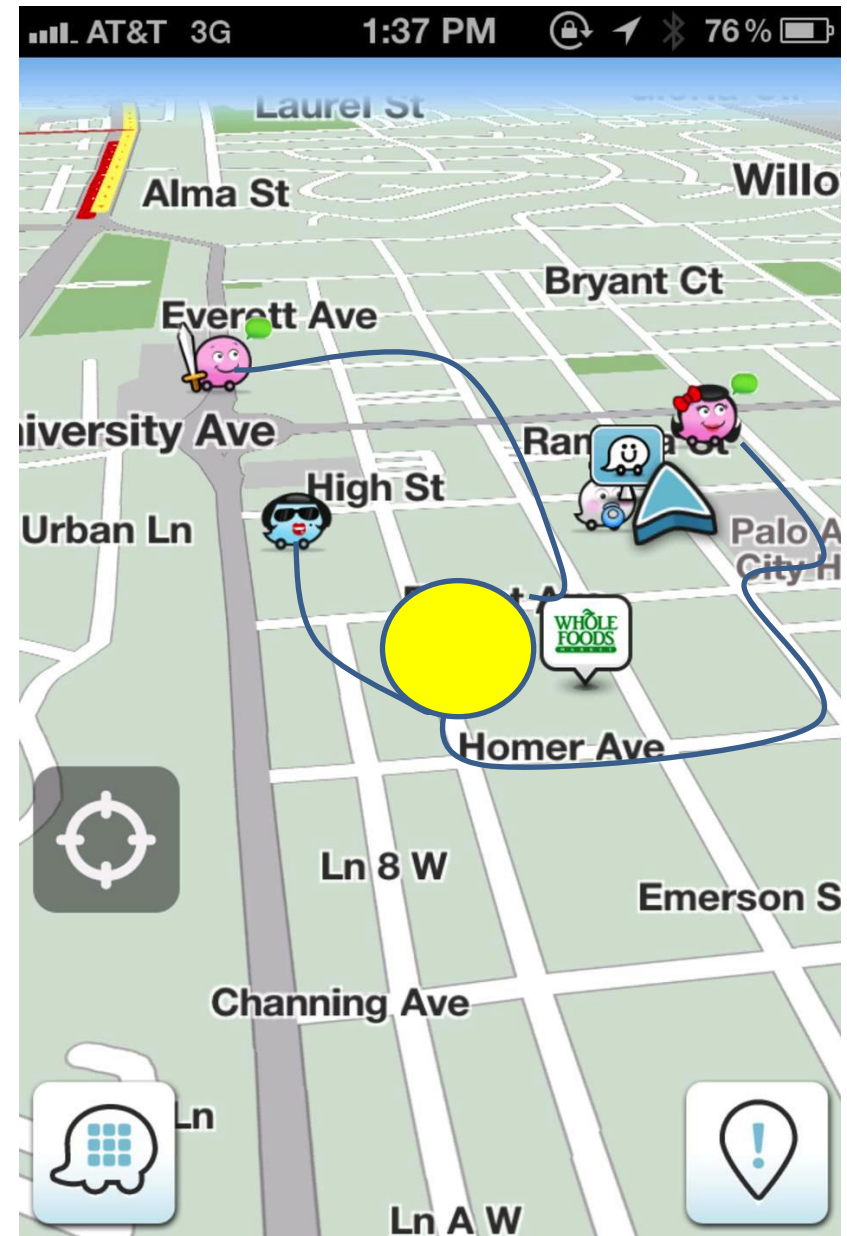
Same meeting point



MEETING POINT PLANNER

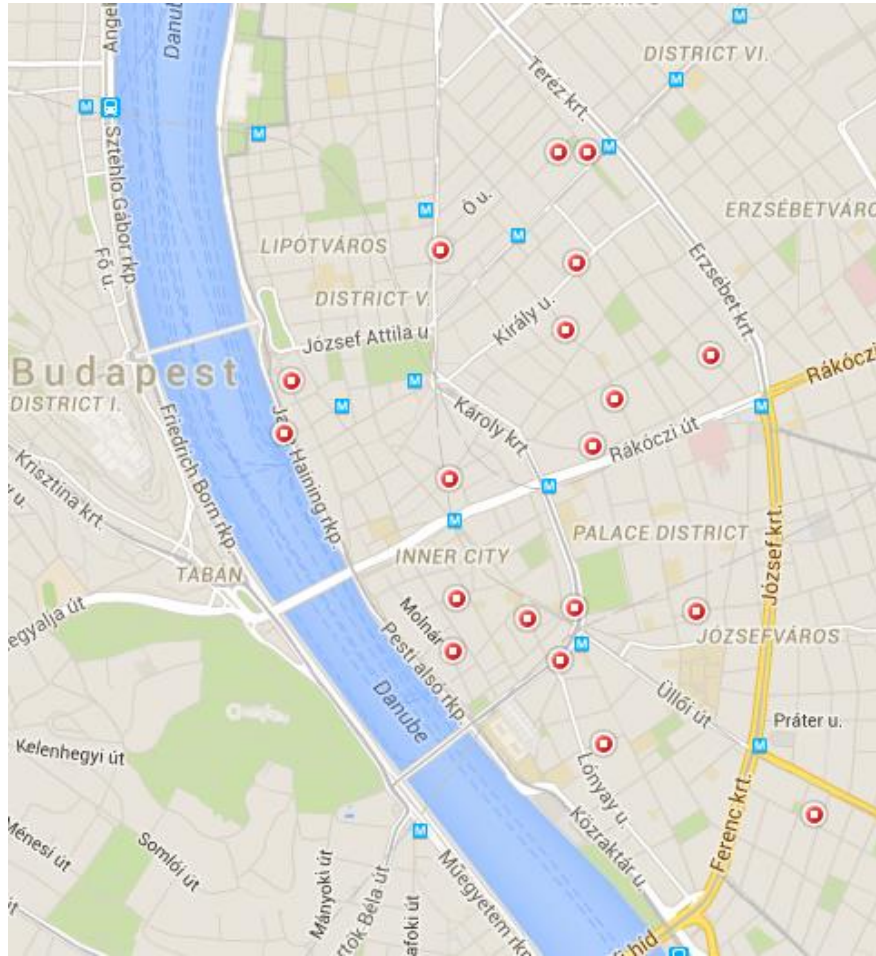
List of points-of-interest (e.g., pubs)

Which is closest to all of the participants



COST LIMIT

$\text{Max}(\text{point-of-interest}) < \text{cost limit}$



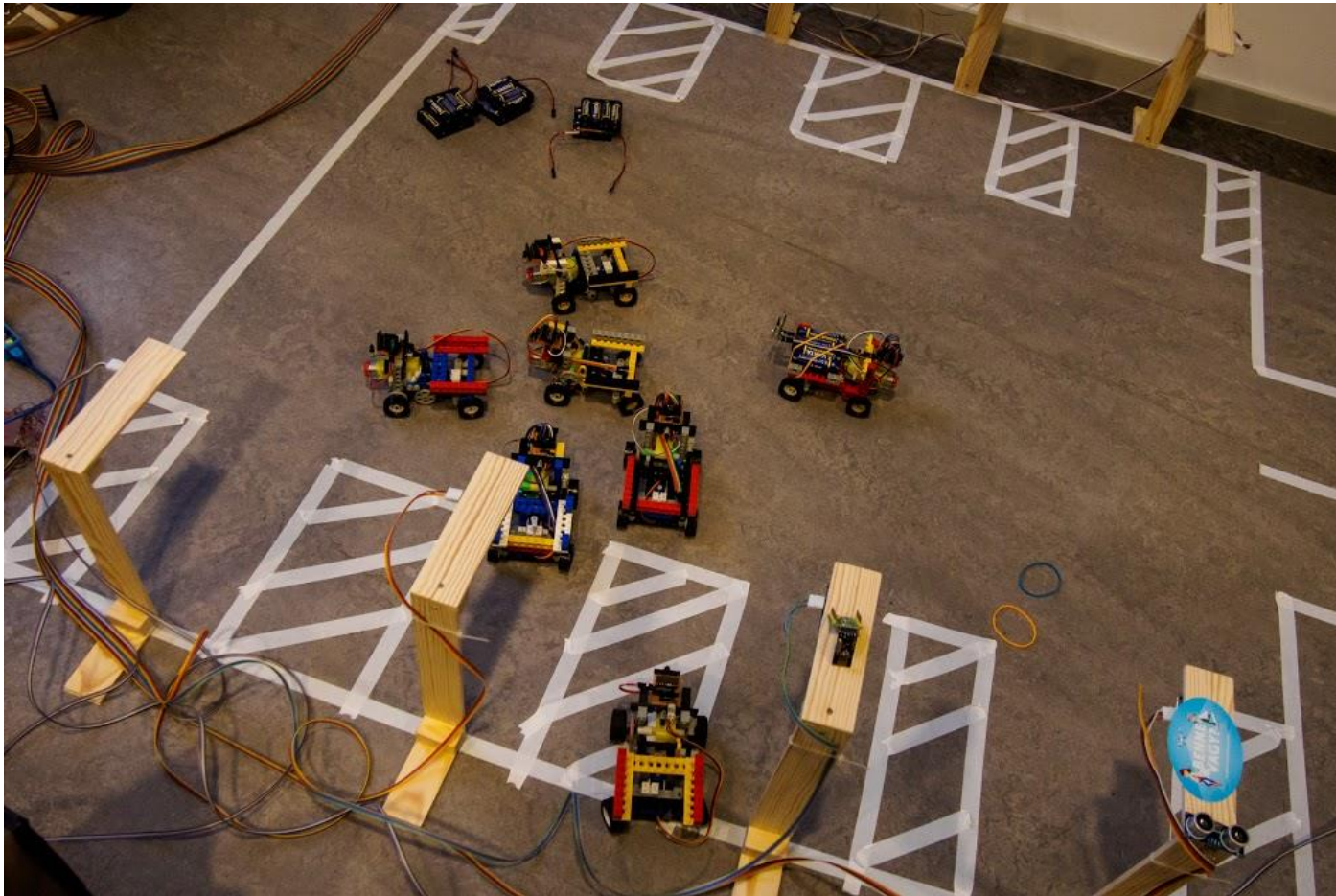
TECHNOLOGIES

Technologies = API

- Waze
- Futár
- Uber, Google, OpenStreetMap

PARKING

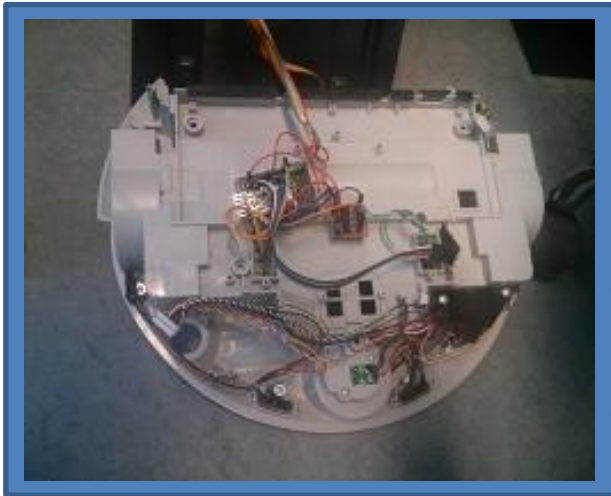
Demo



ROBOTFOCI

What is the robot?

- Arduino controlled vacuum cleaner



Robotfoci

- Task: dogfight, football



CONSUMPTION MEASUREMENT

OBD consumption estimation

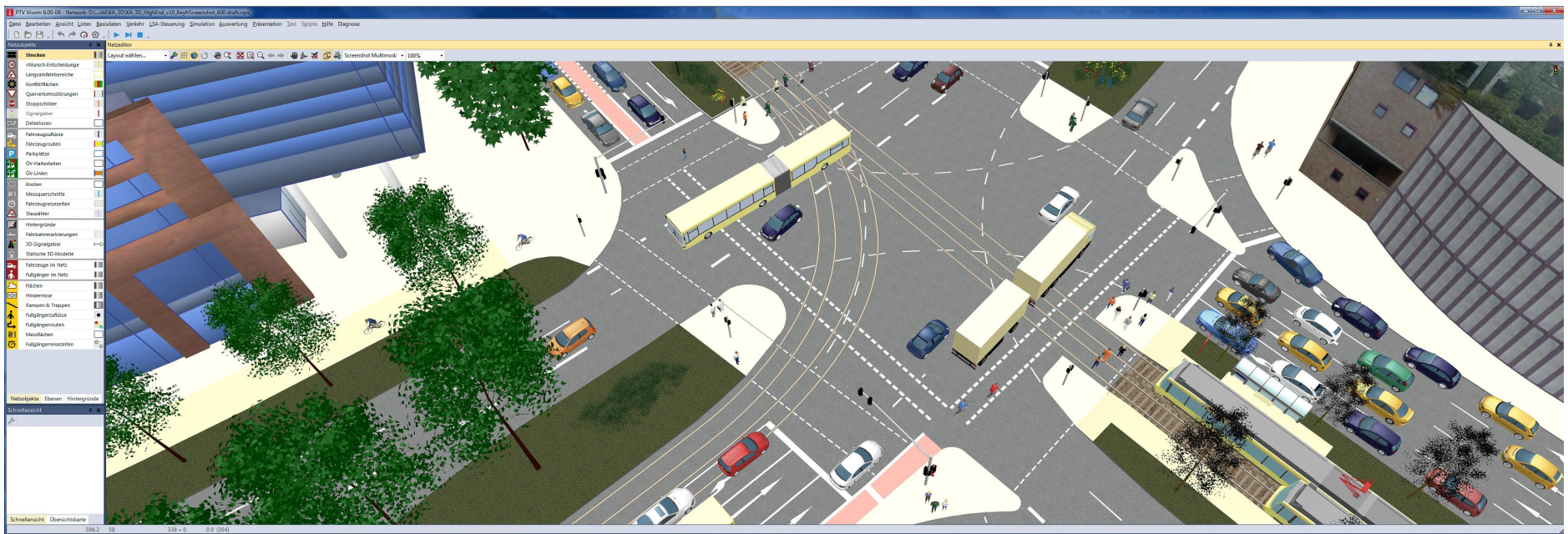


<https://www3.epa.gov/ttnchie1/conference/ei20/session8/aalessandrini.pdf>

http://www.sersc.org/journals/IJUNESST/vol4_no4/3.pdf

<https://www.kth.se/social/upload/532cad2df276545110b64740/indirectinstantaneouscar-fuelconsumptionmeasurements.pdf>

SYMulation



Menu

- „Car parking 1”
 - Juan Alonso Pla, Sergio Fernandez Blanco, Pierre Le Guay
- „Car parking 2”
 - Marc Delannoy, Gabriel Carves, Rami Ibrahim
- Robotfoci
 - Teimour Naeimi, Mathieu Post, Gyula Félix Max
- Meetingpoint
 - Sabina Siudzik, Roderic Michel , Marion Plaisant
- Meeting planner
 - Gedas Lesinskas, Erik van der Kuil, Santiago Gonzalez