



Seminar Human Smart Cities

Kick-off session

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Human Smart Cities Seminar, Autumn Semester 2021

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Course and objectives

Learning outcomes

- Obtain an overview of current smart city challenges
- Get to know a specific problem human-centred smart cities
- Learn how to approach these problems with new services and technologies
- Be able to present and write scientific research in English

Requirements

- **Mandatory attendance** (3 meetings):
 - Today's meeting
 - Mid term presentation (your group's slot)
 - Final presentation (the whole session)
- Projects to be worked on **in groups** (1-3 people)

Presentations and project report

Project proposal

- Plan of your project
- 0.5-2 pages containing: **background** and **motivation** of the project (why working on the topic?), **problem statement** and **research question(s)**, **objectives**, **used methods** and a couple of literature sources related to the project
- To be handed in on ilias **10 days** after the kick-off session

Midterm presentation

- Duration: 5-10 minutes + discussion with teachers and assistants
- You should present your ideas and research questions, as well as the approach to answer them
- You have to be present only during your time slot, but please be on time. Slots will be assigned when we know the groups
- Friday, October 15th 2021, 13:30 - Online
- 20% of final grade

Final presentation

- Duration: 20 minutes + discussion with colleagues
- Present the summary of your project report
- Structure: research question, relevant literature, hypothesis, approach, answer to research question
- Be on time and prepare questions to be discussed during your colleagues' presentations
- Friday, December 17th 2021, 13:30 - Online
- 30% of final grade

- Indicative length: approximately 15 to 30 pages for a group of 2
- Present the summary of your research project
- Have a look at https://ilias.unibe.ch/goto_ilias3_unibe_file_2218350_download.html for the structure of the report
- Deadline: Friday, December 31st 2021, 23:59, on Ilias as PDF file
- 50% of final grade

Topics

Possible topics i

1. **The way to smarter Econ's Citizens:** How to improve people's financial literacy skills, to help them better handle their finances in uncertain times (more details from Biljana later)
2. **Smart governance: transparency and open data:** Currently, in city administration offices, agents have to look for the right answers in different systems and applications in a short time to provide to clients on the phone and via emails. How can we build a new system to deal with this issue? How can we create a list of experts based on the current data. How can we improve this system to connect the questions to experts list in case if there is no answers existing?
3. **City-citizen interface:** Development of an interface facilitating a seamless exchange between the city administration and the citizens, or viceversa.

4. **Wisdom of the crowds:** Identifying and locating problems, needs and challenges to address in a city is often a difficult task. We propose to use only data that is already in the city (e.g., social media data,..) to identify problems belonging to a certain domain. Or use in a smart way feedbacks from citizens, and think to how they can be motivated to participate to the improvement of the city.
5. **Smart city wheel visualizations:** Smartness of cities can be benchmarked with the help of smart city wheels. How can details at different granulations of these benchmarks be visualized in an effective and easily understandable way?

6. **Data platforms for smart cities:** Data platforms are increasingly becoming an important means of exchange between citizens and cities, but also within the municipal administration or between different cities, with the cantons, the confederation or companies offering municipal services. What would be useful data platforms (in general or specific for smart city? Which data is required at which level? How is the data provided? What is the purpose of this data? And in any case, is the data standardized or how could it be standardized?
7. **???:** Propose your own topic

Topic selection rules

- Work should be done in pairs (exceptionally 1 or 3 people)
- It is possible for several groups to work on the same topic, if the project are still significantly different
- Write a short proposal with the **names** of the components of the group and upload it to ilias

Contacts

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Questions?