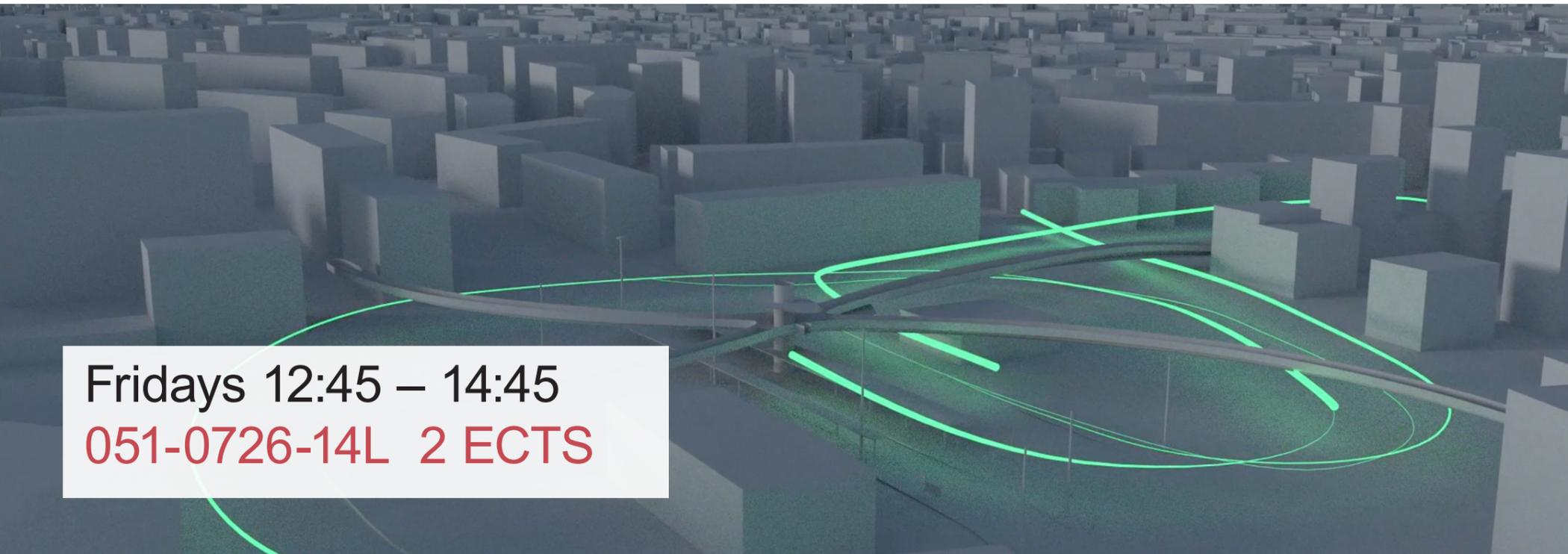# Information Architecture

Fridays 12:45 – 14:45
051-0726-14L 2 ECTS

Visualize ComplexCity

Analyzing and understanding cities is an important phase in urban design. In the future, communication of such is as important. In this course you will use programmatic data visualization to gain new insights to the inner workings of a city and explain them with animation videos to a broader audience.

To do so, you will learn in the course how to connect the two worlds of programming and animation. In the first part of the lecture, you will acquire basic programming skills and write your first programs. At the end of the two weeks, you will develop a first simple computer-game. In the second part of the course, we will jump into the world of animation. Basic animation principlesare taught. At the end of this two weeks session, a short animation will result which will tell the story of one of the many feedback loops in the urban context. The third two weeks session will then connect the before learned and you will combine your new programming and animations skills to visualize abstract data collections in comic-style videos. The last weeks of the course will focus on developing your own project. The result will be a video which tells a story of a particular property in the city.

You will learn how to use Python programming as a tool and how to render an animation using Blender.

Where:
HIT H12
When:
Fridays 12:45 - 14:45

Supervision:

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Date	Topic
21.02.2014	**Introduction** Application Examples + Blender User Interface Exercise: Simple Animation
28.02.2014	**Programming I: Basics & Python Syntax** Think like a computer scientist Exercise: Simple Code
07.03.2014	**Programming I: Use it as a tool** Access Code + Algorithms Exercise: Simple Game
14.03.2014	**Animation I: Explain a Feedback Loop** Texture-Mapping + System Theory Exercise: Storyboard on Feedback Loops
21.03.2014	**Seminar week**
28.03.2014	**Animation I: Feedback Loop Video** Motion Blur + Path Animations Exercise: Render animation of your storyboard
04.04.2014	**Programming II: Traffic Data Visualization** Create a map of traffic data
11.04.2014	**Programming II: Combine Data and Animation** Create an animation of traffic data
18.04.2014	**Good Friday**
25.04.2014	**Spring Break**
02.05.2014 09.05.2014	**Animation II: Explain** For instance: Densification, Vertical City, Traffic A topic from your design class
16.05.2014	**Final iA Critique** Combined critique with the other iA courses

1 ECTS = 30h

The most recent outline will be found on www.ia.arch.ethz.ch

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iA Chair of Information Architecture