

Information Architecture

Mondays 13:00 – 15:00
051-0725-14L | 2 ECTS

Digital Urban Visualization. Understanding Dynamics

Abstract: At what extent do we need to know the instrument called computer in order to not be ruled by it? The goal of this course is to learn the “language of the computer”, a programming language to better understand urban dynamics by plausibly visualize publicly available urban data. The influence of the computer on urban analysis is being reflected in several discussions.

Objective: The participants learn the programming language Python. They learn how to use it as an instrument in design, specifically in urban analysis. Thereby urban data sources will be visualized in student’s favorite visualization packages. Python is supported in most 3D software packages nowadays (Rhino, Maya, Vectorworks, Cinema4D, Blender). Complex websites are being programmed in Python. Still the language itself is as easy as using a (scientific) calculator.

Literature: <http://www.ia.arch.ethz.ch>

Prerequisites / Notice: No programming skills are required. Skilled students will not be bored but can start with the second part of the course right away.

Where

HIT H 12

Supervision

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22.09.2014	Programming: Think like a Computer (Scientist), Basics I
29.09.2014	Programming: Basics II
06.10.2014	Use Programming as a tool: Using libraries. Hear something about algorithms
13.10.2014	Display data on a web page.
20.10.2014	Seminar week (No lecture)
27.10.2014	Display data in 3D: Blender
03.11.2014	Display data in 3D: Rhino
10.11.2014	Idea sketch: mimic the first two weeks of a design studio and try to justify your design with data
17.11.2014	Idea sketch: mimic the first two weeks of a design studio and try to justify your design with data
24.11.2014	Idea sketch: mimic the first two weeks of a design studio and try to justify your design with data
01.12.2014	Final iA critique Combined critique with the other iA courses (14:00 - 18:00)