Faculté de l'Environnement Architectural, Naturel et Construit (ENAC)
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ÉCOLE POLYTECHNIQUE
FÉDÉRALE DE LAUSANNE

ENAC-SIE, SIE Project, Fall 2017	Start:	18/09/2018
4 ECTS credits	End:	21/12/2018 (approx.)

Title	**Demography and evolution: studying Swiss population dynamics**
Supervisors	Doct. Paolo Benettin, Doct. Damiano Pasetto Prof. Andrea Rinaldo
Objective	Spatio-temporal analysis of the Swiss population
Abstract	World populations evolve in space and time following very diverse dynamics. Most european countries, including Switzerland, are in an "ageing" phase, where newborn are decreasing and mean population age is around 40 years (see Figure 1). Population age is also strongly influenced by migration patterns which follow socio-economical dynamics. Switzerland has one of the most complete demographic records in the world, which can be used to understand and predict its population evolution.
Task description	1. data collection from various web sources 2. study of the data and its documentation 3. analysis of temporal population dynamics 4. analysis of spatial population dynamics
Required skills	• good knowledge of a programming and data analysis software (like Matlab, R, Python)
Location	EPFL campus, Lausanne (CH)
Contact	paolo.benettin@epfl.ch

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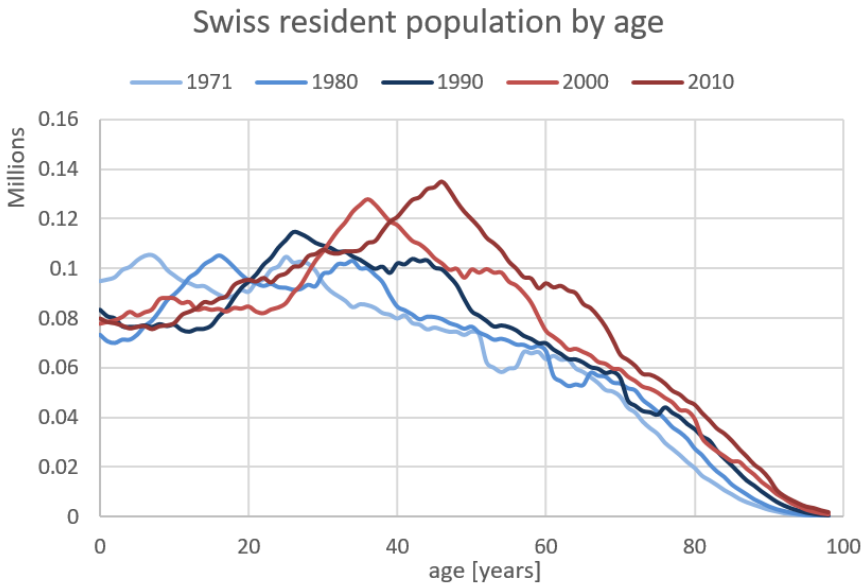

Figure 1: Examples of total Swiss population by age