Using Data Science for Urban Water Management

Data4Water Training 3   *May 31 - June 02, 2017*

Date	Time	Room	Lecturer	Subject
WED 31 May				
	13:30-14:20	PRECIS 606	*Francesco Archetti*	Hyperparameters tuning / algorithmic configuration through Sequential Model Based Optimization
	14:30-15:20			
	15:30 -16:20			
THU 01 June				
	09:30-10:20	PRECIS 606	*Antonio Candelieri*	Nature of the time series data Time Series data representation (raw data, features extraction, modelling)
	10:30-11:20	PRECIS 606	*Antonio Candelieri*	Statistical inference vs ML in the Time Series analysis domain Main Time Series analysis tasks
	11:30-12:20	PRECIS 606	*Antonio Candelieri*	Evaluating Similarity among time series Time Series Clustering
	13:30-14:20	PRECIS 606	*Antonio Candelieri*	Time Series Prediction/Forecasting
	15:30 -15:20	PRECIS 606	*Antonio Candelieri*	An example: time series clustering and (SVM) regression for urban water demand forecasting in the short
	15:30-16:20	PRECIS 606		term
FRI 02 June				
	09:30-10:20	PRECIS 606	*Antonio Candelieri*	Big versus Fast/Streaming data
	10:30-11:20	PRECIS 606	*Antonio Candelieri*	Characteristics and differences with respect to "traditional" Machine Learning
	11:30-12:20	PRECIS 606	*Antonio Candelieri*	Online Machine Learning challenges: learning under concept drift/shift Evaluation procedures in the online setting
	13:30-14:20	PRECIS 606	*Antonio Candelieri*	Algorithms for online- clustering, classification, regression, anomaly detection, drift/shift detection Some available tools for online machine learning
	14:30-15:20	PRECIS 606	*Antonio Candelieri*	An example: urban water demand forecasting through online machine learning
	15:30-16:30	PRECIS 606	*Antonio Candelieri*	Tasks' Assigment