Virtual benchmarking of strategies for control of integrated urban drainage/wastewater systems

Real Time Control is increasingly implemented across urban drainage systems of urban wastewater systems to reduce the environmental impacts of these systems with reduced investments. Different strategies and methods have been developed, but their performance are difficult to compare as they are closely related to the specific characteristics of the area where they are implemented.

The project aims at extending the SWMM generator of virtual drainage networks (developed by University of Innsbruck, Austria) with features that are specifically targeting RTC. Subsequently, these virtual networks are used to benchmark different control strategies.

Tool: detailed hydrodynamic model (SWMM), MATLAB.

Project type
Topic is suitable for MSc project

Pre-requisite
General understanding of urban drainage, interest in modelling and programming

Group size
1-2 students (separate projects)

Department of supervisors
Main supervisor: DTU Environment
Co-supervisor: DTU Environment/Krüger A/S

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