Optical observations in urban water systems and rivers

Webinar, 15 March 2024
9:30 – 12:00 CET

UNIVERSIDADE DA CORUÑA

Co-UDlabs
COLLABORATIVE URBAN DRAINAGE RESEARCH LABS COMMUNITIES

Deltares

The Co-Udlabs project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 101008626.

Optical observations in urban water systems and rivers

Webinar 15 March 2024
9:30-12:00 CET

Goal
This webinar presents recent advances in the application of optical imaging techniques for monitoring water quantity/quality dynamics and hydraulic structures. We will present several state-of-the-art large-scale PIV techniques for flow estimations in rivers, urban infrastructure, and different AI-assisted data processing routines to extract information on the hydro-environment.

Target audience
This webinar is aimed at researchers, engineers, planners, and operators of water systems, representatives of municipalities and authorities, as well as manufacturers of monitoring equipment, who would like to gain further insight optically-based environmental monitoring in rivers and urban water infrastructure.

Date, Time, Place
Friday, 15 March 2024, 9:30– 12:00CET
Online

Contacts
www.co-udlabs.eu
info@co-udlabs.eu

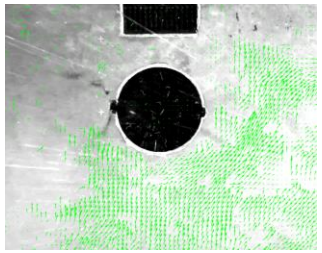
Registration:
REGISTER HERE

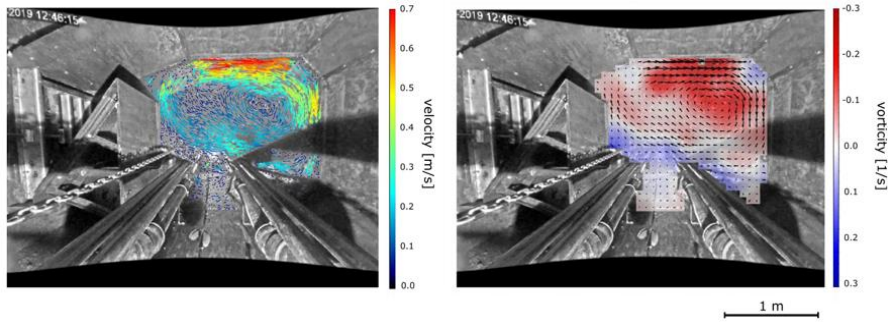
Participation is free.

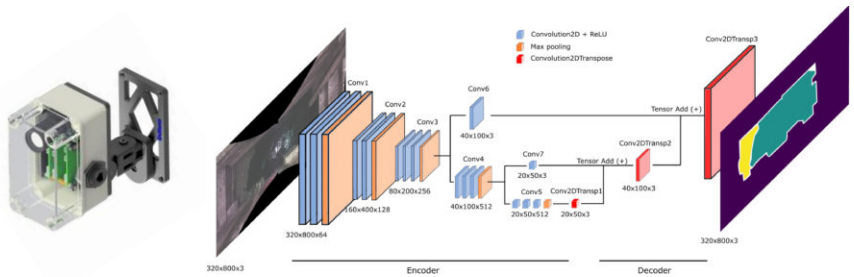
Program

9:30	**Welcome and introduction** Dr. Antonio Moreno-Rodenas, Deltares
9:35	**Large-scale PIV in urban structures** Dr. Juan Naves, Universidade da Coruña
9:50	**Open source image-based velocimetry in rivers** Dr. Hessel Winsemius, Deltares/Rainbow Sensing
10:05	**Image-based discharge measurements in sewers** Dr. Salvador Peña-Haro, Photrack
10:20	**Using water surface waves for discharge monitoring in rivers** Dr. Giulio Dolcetti, University of Trento
10:35	Coffee-Break
10:45	**Deep-learning for hydro-environmental applications** Dr. Antonio Moreno-Rodenas, Deltares
11:00	**Deep-learning for sewer pipeline defect classification** Prof. Simon Tait, University of Sheffield
11:15	**Estimation of flood water-depth from social media imagery** Ass Prof. Joao Leitao, EAWAG/ETH
11:30	**An introduction to non-contact wastewater quality monitoring with hyperspectral camera** Pierre Lechevallier / Dr. Jorg Rieckermann EAWAG
11:45	**Discussion and Closure**

Deltares UNIVERSIDADE DA CORUÑA







Co-UDlabs
COLLABORATIVE URBAN DRAINAGE RESEARCH LABS COMMUNITIES