Hochschule für Technik Stuttgart

1st Summer School of the Graduate Research Training Group

Urban Digital Twins and Applications

August 06-07, 2024

Schwäbisch Gmünd, Germany

General Information

VENUE

Schönblick, Seminar Raum 10
Christliches Gästezentrum Württemberg
Willy-Schenk-Straße 9
73527 Schwäbisch Gmünd
info@schoenblick.de
07171 9707-0

How to reach the conference:
https://www.schoenblick.de/de/anfahrt#anfahrtsbeschreibung

GUIDELINES FOR SPEAKERS

Each speaker is required to bring a USB stick with the presentation and upload the file to the computer at the Seminar Raum 10. If your talk is in the afternoon, please upload it in the morning. If your talk is in the morning, please upload it during the break before your session at the latest.

You will be also allowed to offer presentations using your own laptop in the conference room.

The suggested presentation formats are PDF and PPT.

1st Summer School of the Graduate Research Training Group
Urban Digital Twins and Applications
August 06-07, 2024
Schwäbisch Gmünd, Germany

Program

August 06, 2024 (Day I)

Seminar Room 10

9:30	**Registration opens**
10:00	**Welcome Address** by Prof. Dr. Ursula Voß
10:05	**Warm Up & Team Building** by Dr. Daniela Claus
10:45	**Urban Climate Simulation for Sustainable and Resilient Urban Design: CFD Methods and Quality Assurance** Prof. Dr. Ursula Voß, HFT Stuttgart
11:15	**Coffee break**
11:30	**Urban Climate Simulation for Sustainable and Resilient Urban Design: Applications and Software** Dr. Svetlana Valger, HFT Stuttgart
12:00	**Discussion, free time**
12:30	**Lunch break**
13:30	**How to represent urban areas in PALM-4U – model basics and needed input data** M.Sc. Johanna Henning, Fraunhofer Institute for Building Physics
14:30	**Workshop "Representing urban areas in PALM-4U using the PALM-4U GUI"** M.Sc. Johanna Henning, Fraunhofer Institute for Building Physics
15:30	**Coffee break**

Presentation of PhD research projects
(Chair: Prof. Dr. Ursula Voß, Prof. Dr. Berndt Zeitler (online))

16:00	**Towards a study about the impact of climate adaptation measures on urban air flows** M.Eng. Benjamin Hueber, HFT Stuttgart
16:20	**Understanding and Predicting Acoustic Perception in Urban Spaces** M.Eng. Michaela Marxt, HFT Stuttgart

16:40	**Hybrid participation formats as an instrument for the implementation of urban greening** M.Sc. Amando Reber, HFT Stuttgart
17:00	**Outlook to Day 2**
17:10	**Free time**
18:00	**Dinner break**
19:30	**Impro-Theater, part 1,** Martin Esters & All

August 07, 2024 (Day II)

Seminar Room 10

9:00	**Impro-Theater, part 2,** Martin Esters & All
10:00	**Welcome presentation, Day 2** (Online) Prof. Dr. Volker Coors, HFT Stuttgart
10:30	**From Images and Point Clouds to Semantic Information in Urban Areas** Prof. Dr. Eberhard Gülch, HFT Stuttgart
11:00	**Coffee break**
	Presentation of PhD research projects (Chair: Prof. Dr. Eberhard Gülch)
11:15	**Investigation of Machine Learning approach for automatic 3D vegetation extraction in urban environment using Multispectral image and Point Cloud data** M.Sc. Arpita Sinha, HFT Stuttgart
11:35	**Light independent 3D-3D point cloud learning-based alignment of Extended Reality Scenes for on-site BIM applications** M. Sc. Juan Sardi, HFT Stuttgart
11:55	**Framework for Visualizing Geospatial Data in AR and VR Digital Urban Twins to Enhance Public Participation in Urban Planning** M.Sc. Muhammad Alfakhori
12:15	**Workshop "Knowledge transfer: using Transferportal HFT to share data and results" & Discussion** by M. Sc. Muhammad Alfakhori & All
12:30	**Closing ceremony** by Dr. Daniela Claus, Dr. Svetlana Valger
12:40	**Lunch break**