

**HOCHSCHULE
FÜR TECHNIK
STUTT GART**

S U M M E R S C H O O L 2 0 2 5

**Urban Transformation: Urban
Digital Twins, Smart Planning
and AI Technologies**

July 21 - 22
HFT Stuttgart



PROGRAMME

July 21, 2025 - Day I

8:30 - 12:30	Fundamentals of Machine Learning and Deep Learning Workshop for doctoral candidates, Prof. Dr. rer. nat. Michael Mommert, HFT Stuttgart Building 3, Room 103
12:30 - 13:30	Lunch break - bring something you like or explore nearby spots
13:30 - 13:45	Summer school opening Building 8, Room 0.43
13:45 - 14:45	CitiVerse - the Next Step in Urban Digital Transformation Keynote Lecture Prof. Dr.-Ing. Dieter Uckelmann, HFT Stuttgart
14:45 - 15:00	Coffee Break
Session S1. Smart City Planning and Public Participation Moderator: Martin Müller, Lebenswerke GmbH Stuttgart	
15:00 - 15:15	New technical possibilities in Citizen Participation Martin Müller, Lebenswerke GmbH Stuttgart
15:15 - 15:45	Smarter Cities Start with People: The Role of Participation in Urban Tech Planning Dr. Frank Friesecke and Hamidreza Ostadabbas, die STEG
15:45 - 16:00	Bringing Cities to Life: AR/VR Tools for Public Participation Muhammad Alfakhori, HFT Stuttgart
16:00 - 16:15	Measuring Soundscape Comfort in Open Urban Public Places Michaela Marxt, HFT Stuttgart
16:15 - 16:30	Coffee Break
16:30 - 18:00	Fishbowl Discussion - New technical possibilities in Citizen Participation All participants
<i>End of day I</i>	

July 22, 2025 - Day II

9:30-10:00	<i>Welcome Coffee</i>
10:00 - 12:00	Germany's Smart Cities: Insights from 7 Years of Blogging and Where We Stand Today Keynote Lecture, Dimitri Ravin, responsible for Content & Partnerships @urban-digital.de
12:00 - 13:00	Lunch break - bring something you like or explore nearby spots
Session S2. Urban Digital Twin and Metaverse Moderator: Prof. Dr.-Ing. Christoph Runde, VDC Fellbach	
13:00 - 13:40	Opening Session Prof. Dr.-Ing. Christoph Runde, VDC Fellbach
13:40 - 14:00	Digital Twins for cities and regions Dr.-Ing. Stefan Trometer, virtualcitysystems GmbH
14:00 - 14:20	Blending the digital and physical worlds through Mixed Reality: a 3D to 3D method for aligning digital assets with physical environments Juan Sardi Barzallo, HFT Stuttgart
14:20 - 14:40	Coffee Break
14:40 - 15:00	Approach for automated 3D Vegetation Extraction in Urban Environment using Multispectral Image and Point Cloud Data Arpita Sinha, HFT Stuttgart
15:00 - 15:20	Development and Numerical Analysis of Active Bottom Surface Cooling (ABSC) for Urban Heat Mitigation and Thermal Comfort Enhancement Benjamin Hueber, HFT Stuttgart
15:20 - 15:40	Digital twinning with optimization of dynamic allocation of the devices using federated learning technique: Industry of the future/hospital emergency or epidemic Crisis decision making Atheer Alshaggah, JUNIA School of Science and Engineering, Polytechnic University of Hauts-de-France, Lille
15:40 - 16:00	Unveiling the Potential of Digital Twins: From Buildings to Urban Environments Karla Saldaña Ochoa - Dr.Sc MAS LA ETHZ Arch, College of Design, Construction and Planning, University of Florida
16:00 - 16:20	CLOSING CEREMONY

VENUE

HFT Stuttgart

Gefördert durch:



Bundesministerium
für Forschung, Technologie
und Raumfahrt



Baden-Württemberg
Ministerium für Wissenschaft,
Forschung und Kunst

Workshop "Fundamentals of
Machine Learning and Deep
Learning"

Summer School
Sessions

Building 3

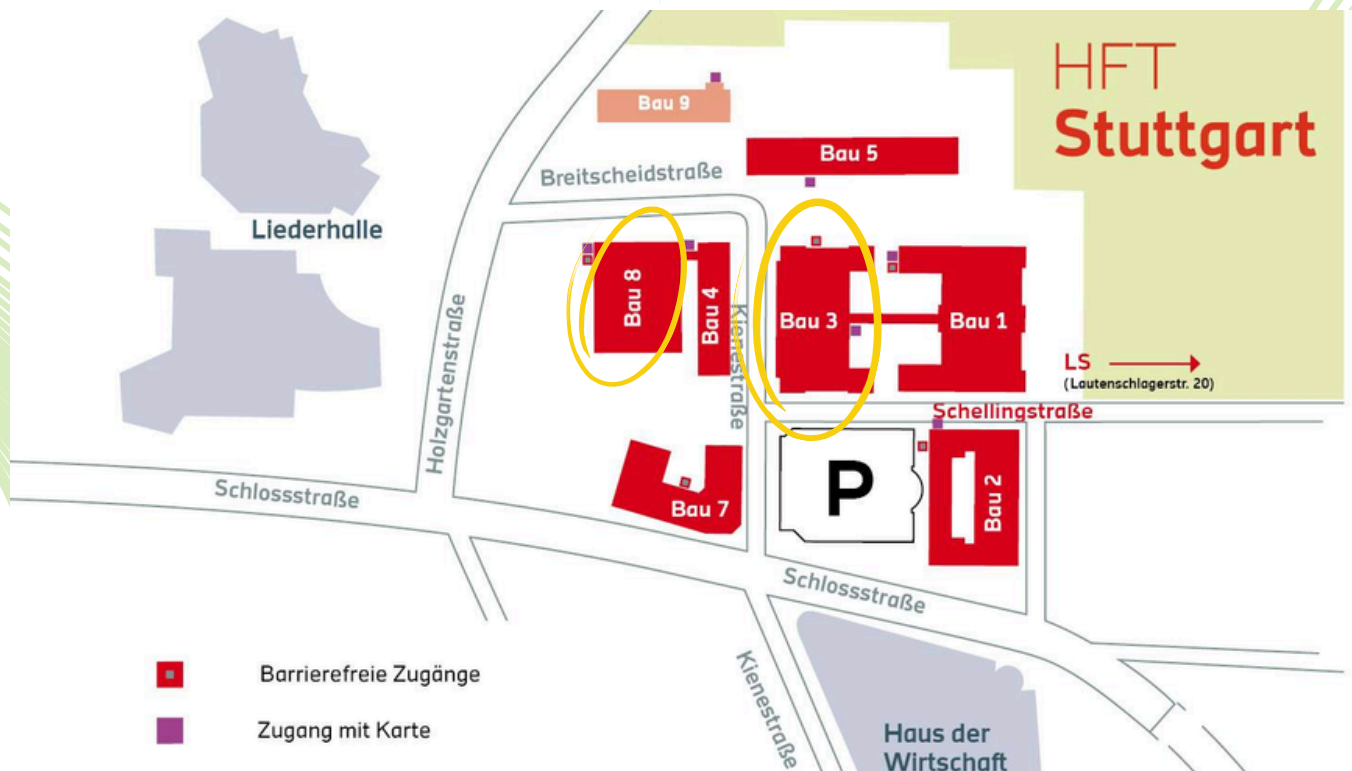
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Building 8

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