

Second Annual Open Day and Workshop Christian Doppler Laboratory Digital Twin assisted AI for sustainable RAN

Head of laboratory: Philipp Svoboda

November 15, 2024
09h00 – 15h00

Kontaktraum Neues EI - 6th floor



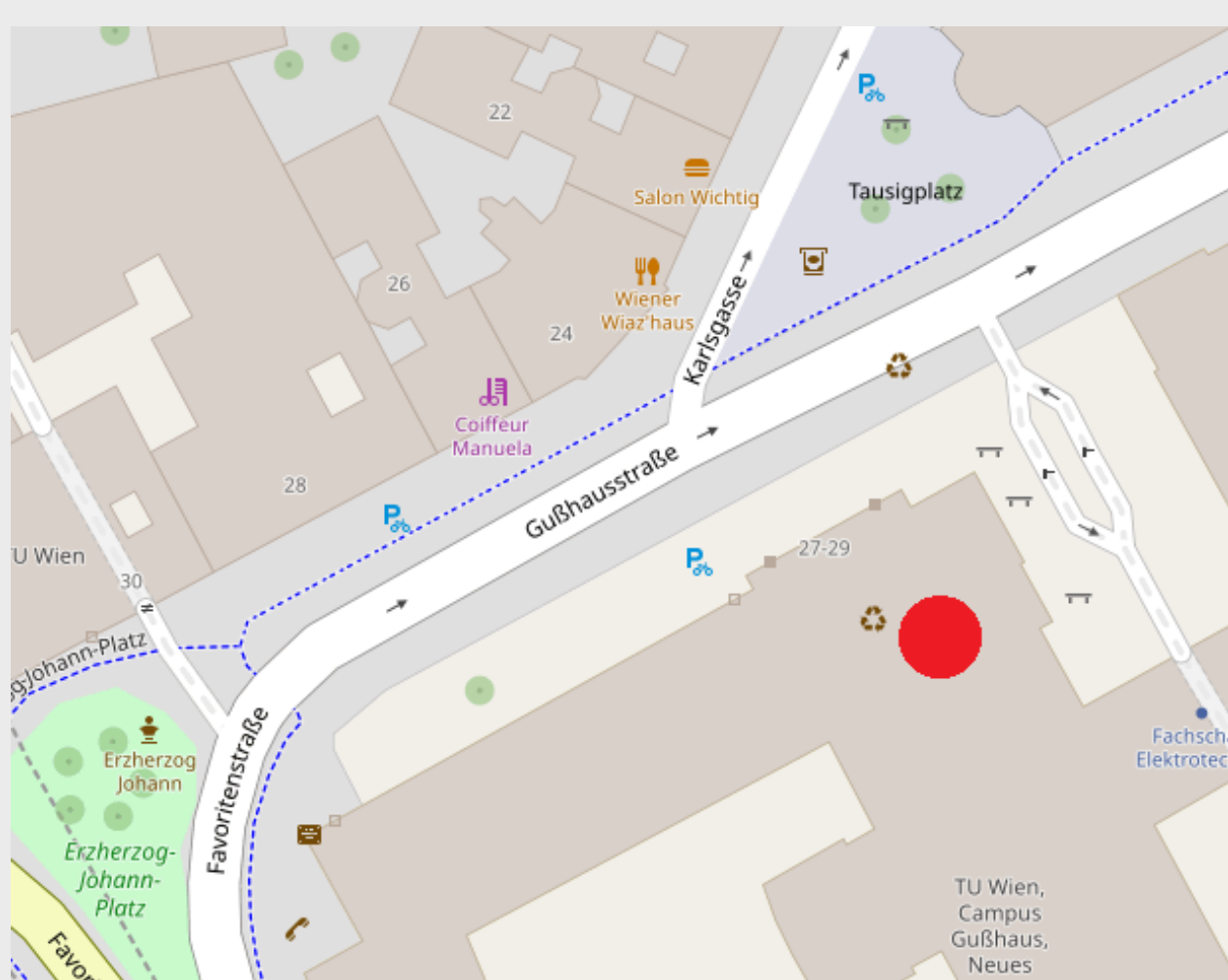
Program

	09:00 – 9:30	Welcome Coffee Session	
	09:30 – 10:00	Opening Session	
		– Coffee Refill –	
Morning	10:15 – 12:00	Research Update by CD-Lab Members	
		Towards Safe and Efficient Network Self-Optimization through Digital Twinning	L. Eller
		Graph-Based DT for Sustainable Radio Access Networks	M. Mussbah
		Digital Twin for Railway	S. Tripkovic
		Simulation-Based Evaluation of Structure Window Coatings	W. Wiedner
		– Lunch Break –	
Afternoon	13:00 – 14:30	Research Update by CD-Lab Members	
		Integration of Satellite Communication in Digital Twin Environment	A. Fastenbauer
		Towards a RAN-Based DT for Cooperative Network Sensing	B. Tahir
		Propagation Conditions of mmWaves in Beamforming Scenarios	R. Prüller
	14:30 – 15:00	Outlook 2025	
		– Coffee, Networking and F2F Project Activity –	

CD-Lab Modules

- Opening Session
- DT assisted AI: Campus
Lukas Eller, Mariam Mussbah, Agnes Fastenbauer Philipp Svoboda
- DT assisted AI: Railroad
Sonja Tripkovic, Wilfried Wiedner
- DT assisted AI: Sensing
Bashar Tahir, Richard Prüller
- Outlook 2025
Philipp Svoboda

Location



Kontaktraum (6th floor)
Gusshausstrasse 27-29
1040 Wien

Project Details

This CD laboratory aims to create a foundation for using artificial intelligence (AI) based learning and training methods in wireless networks in various scenarios, with the benefits of efficiency, sustainability, and reliability. For this purpose, we develop so-called “digital twins” (DT), representing enormously different environments such as trains, industrial sites, and dynamic environments, along with the corresponding wireless access and user populations.

Registration and online Information

Please register until November 8

E-Mail: philipp.svoboda@tuwien.ac.at

Information for virtual attendance and offline videos here: [Link](#)

Contact

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