

# LDAC2025

## 13<sup>th</sup> Linked Data in Architecture and Construction Workshop

### 09-11 July 2025

LDAC presents a forum for technical and applied research on the usage of semantic web, linked data and web of data technologies for architecture and construction (design, engineering, construction, operation). The workshop aims at gathering researchers, industry stakeholders, and standardization bodies of the broader Linked Building Data (LBD) community. The workshop series has been held yearly since 2012, taking place in numerous locations and venues, sometimes co-located with AEC or web technology conferences and sometimes as independent events. The workshop welcomes industry participation and brings together experts from the AEC field with computer scientists and software developers familiar with (semantic) web technologies.

<https://linkedbuildingdata.net/ldac2025>



# CALL FOR PAPERS

LDAC2025 takes place in **Porto**, Portugal, and is co-located with EC3-CIB W78 2025. As in the past years, the workshop covers work from three perspectives: **research, technical discussions, and industry cases**. In short, LDAC welcomes stakeholders from research and practice and serves as a communication platform to advance and innovate the use of linked data in architecture and construction.

## SEMANTICS SCOPE

LDAC aims at providing a forum for technical discussion on the topic of **handling data in architecture and construction**. A large part of the workshop is concerned with the use of **(semantic) web technologies**. Research is welcomed on the use of ontologies and vocabularies for representing **building data, 3D geometry, product data, geospatial data, infrastructure data, HVAC data, sensor data, and so forth**.

## FOCUS ON DATA

Additionally, the workshop welcomes work on how to combine these highly semantic datasets with other data sets, which in the case of architecture and construction consist mainly of geometry and sensor data streams. Using **different data storage techniques (semantic data stores, time series databases, key-value stores)**, the purpose of the LDAC workshop is to investigate ways in which data can be combined into a complete and holistic set of available building data.

## INDUSTRY PRACTICE

Practical techniques of combining datasets in the current web-based and data-driven world are explored: **Internet of Things, Machine Learning, Digital Twins, Building Information Modelling**. A number of **industry cases** are invited, presenting interesting ideas, use cases, solutions or experience reports related to **practical applications at any stage of construction lifecycle**.

# WORKSHOP TRACKS AND TOPICS

The LDAC2025 topics include the following. These are indicative topics; similar other topics are welcome as well.

## Linked Building Data

- Knowledge graphs for buildings
- GIS-BIM integration using linked data
- Building-related ontologies: BOT, Brick, SOSA/SSN, OMG/FOG, OPM, DOT, IFC
- Infrastructure: rail, road, infra
- Construction site automation using linked data
- Geometry representations and querying using linked data
- Linked Building Data management and collaboration

## Ontology Engineering

- Mapping and alignment of data or ontologies
- Graph data modelling
- Semantic enrichment for the AEC industry
- Reasoning and querying
- Rule and constraint systems
- Ontologies and Machine Learning

## Systems Development and Integration

- Operational system integration
- Semantic digital twins
- Web-development
- Large Language Models and Natural Language Processing and Linked Building Data
- GenAI and Linked Building Data
- Graph Analytics
- Security and access control

## Posters

- We welcome posters on all topics mentioned above.

## IMPORTANT DATES

- |  |                       |
|--|-----------------------|
| • Abstract submission (optional – no review) | January 20            |
| • <del>Paper submission</del>                | <del>January 27</del> |
| • <b>Paper submission Extended</b>           | <b>February 15</b>    |
| • Notification of acceptance (paper)         | March 24              |
| • <b>Poster submission</b>                   | <b>April 7</b>        |
| • Revised paper submission                   | April 7               |
| • Notification of acceptance (rebuttal)      | April 21              |
| • Notification of acceptance (poster)        | May 5                 |
| • Camera ready (paper)                       | May 5                 |
| • LDAC2025                                   | July 9 – July 11      |



## CO-LOCATION WITH EC3 – CIB W78

LDAC2025 will be co-located with the **EC3 – CIB W78 joint conference!** The EC3 – CIB W78 conference takes place from 14 to 17 July, also in Porto. More information about the EC3 – CIB 78 conference can be found here:

<https://ec-3.org/conference2025/>

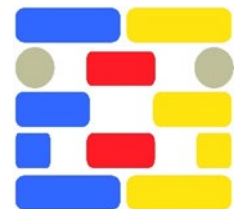
Furthermore, the EC3 Summer School on Computing in Construction is scheduled from 7 to 11 July in the same premises of the LDAC workshop. Hence, there will be overlapping activities and joint events from 9 to 11 July, between EC3 summer school and LDAC workshop.

Furthermore, social excursions and activities will be scheduled on Saturday 12 July for those that stay for LDAC as well as EC3-CIB W78.

The registration system includes combi-tickets for these events.



2025 EC<sup>3</sup>



# SUBMISSION

## SCIENTIFIC PAPERS

Scientific papers are welcome for submission in the **EC3-CIB W78-LDAC 2025 ConfTool platform**: <https://www.conftool.org/ec3-2025/index.php>. Submit a paper of max. 14 pages (PDF) before the submission deadline. Please follow the [CEUR-WS Proceedings template](#) (Word, LaTeX) in one-column format, and make a submission directly via ConfTool in PDF. This can also be prepared using the template file in [Overleaf](#).

## REVIEW PROCEDURE

Each paper will be reviewed (single-blind, no need to anonymize the papers) by at least two independent reviewers from the **program committee**. Accepted submissions will be published as part of a separate volume of the [CEUR-WS proceedings](#).

This does not include poster contributions, which can be submitted in a separate poster track. If accepted, the paper must be presented at the workshop by one of the authors (registration required).

## POSTER TRACK

Similar to last year, we include a **poster track**, to present and demonstrate ongoing research and development related to Linked Data in Architecture and Construction. Posters will be presented in a separate session where attendees can move between posters, encouraging in-depth discussions with other participants and experts in the field. We particularly **encourage early-career PhD researchers** to submit a poster with their research approaches and results. A poster presentation may also include a **live demonstration** of research prototypes alongside the poster.

To present a poster at LDAC2025, you have to submit an extended abstract of your work via the [EC3-CIB W78-LDAC 2025 ConfTool platform](#). Extended abstracts for the PhD poster track must contain max. **500 words** describing the content of the work to be presented in the poster. Submissions are reviewed by the program committee regarding their topicality and quality. They will not be published in the workshop proceedings.

## INDUSTRY TRACK

As part of the workshop, we invite **companies** to present interesting cases, innovations, research and development related to Linked Data in Architecture and Construction in an **industry market place**. Do you have relevant software to present to workshop participants, or are you in an AEC organization that deploys, requires or consumes linked data, then this is your place to be. The industry market place will take place over the two workshop days and allows you to **talk to industry experts and researchers** during the breaks and sessions.

Participation in the industry market place is available through the Sponsoring Packages of LDAC. Please contact [ldac2025@linkedbuildingdata.net](mailto:ldac2025@linkedbuildingdata.net) directly in case of interest.



# PRELIMINARY PROGRAM

LDAC2025 will be organized as a **3-day workshop**, prior to the EC3-CIB W78 conference. This will include keynote presentations, plenary research paper sessions, a poster track and an industry market place.

## WEDNESDAY July 09

Evening	Welcome reception
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## THURSDAY July 10

09:00-10:00	Opening and keynote presentation
10:30-12:30	Plenary session
13:30-15:30	Plenary session
16:00-18:00	Poster track and industry fair

## FRIDAY July 11

09:00-10:00	Keynote presentation
10:30-12:30	Plenary session
13:30-15:30	Plenary session
16:00-16:30	Closing session
20:00-23:00	LDAC dinner (with EC3 Summer School participants)

## VENUE



LDAC2025 takes place at the [FEUP - Faculdade de Engenharia da Universidade do Porto](#). Address: Campus FEUP – Rua Dr. Roberto Frias, s/n 4200-465 Porto. The Faculty of Engineering Campus is located in Paranhos, 3,5 km North Porto City Historic Centre.

The Faculty of Engineering is part of the University of Porto. Porto is located in northern Portugal. Its historic city center is a UNESCO World Heritage site since 1996. It is famous for its wine and its location around the river Douro.

## LOCAL ORGANISATION

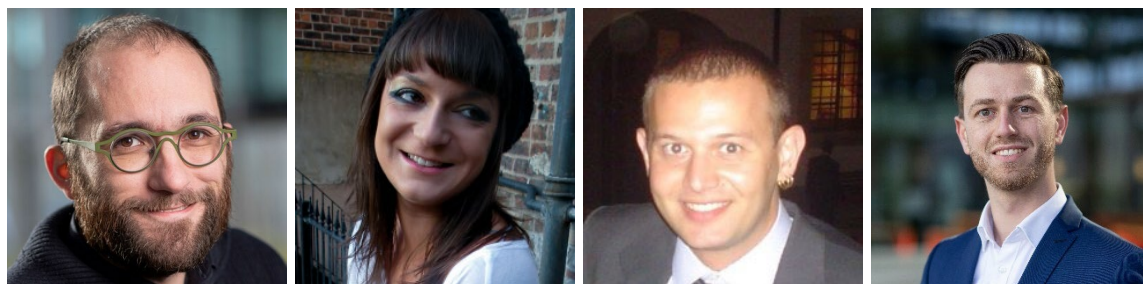


**Pedro Meda**  
University of Porto



**Diego Calveti**  
University of Porto

## LDAC COMMITTEE



**Pieter Pauwels**

Eindhoven  
University of  
Technology

**María Poveda-  
Villalón**

Universidad  
Politécnica de  
Madrid

**Walter Terkaj**

Consiglio  
Nazionale delle  
Ricerche (CNR)

**Alex Donkers**

Eindhoven  
University of  
Technology

## SUPPORT

You can support LDAC2025 through one of the options in the sponsoring package (silver, gold, diamond). If you are interested, then please get in touch via

[ldac2025@linkedbuildingdata.net](mailto:ldac2025@linkedbuildingdata.net).

