

Igor Bajena

Curriculum Vitae

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Education

10/2012-06/2016 Bachelor of Science: **Architecture and Urban Planning**,
Warsaw University of Technology, Poland
10/2016-12/2019 Master of Science: **Architecture**,
Warsaw University of Technology, Poland
11/2021-present Doctor of Philosophy: **Architecture and Design Cultures**,
University of Bologna, Italy

Research experience

09/2022-present **CoVHer - Computer-based Visualization of Architectural Cultural Heritage**
Institute of Architecture, University of Applied Sciences in Mainz, Germany
Managing a repository of 3D reconstruction models, support for the organization of student workshops, verification of student models for 3D printing, AR applications and web publication.

04/2020-07/2023 **DFG 3D-Viewer – Infrastructure for 3D-Reconstruction**
Institute of Architecture, University of Applied Sciences in Mainz, Germany
Definition of the exchange format and 3D model maintenance in a web-based repository. Data modelling in CIDOC-CRM within the WissKI data base.

04/2020-09/2020 **Digital Urban History Lab (DUHL)**
Institute of Architecture, University of Applied Sciences in Mainz, Germany
3D-modeling, 3D-printing and visualization based on historical sources and technical project coordination, exhibit production.

08/2019-04/2020 **Mainz – Worms – Speyer. Three medieval cities in the center of Europe as linked data**
Institute of Architecture, University of Applied Sciences in Mainz, Germany
3D-modeling, 3D-printing and visualization based on historical sources and technical project coordination.

02/2020-06/2020 **LUX4d - Interactive access to the city's history on example of Ludwigsstraße area in Mainz**
Institute of Architecture, University of Applied Sciences in Mainz, Germany.
Support with the LUX 4-D exhibit production, 3D modeling and 3D printing as well as visualization.

04/2018-01/2020 **Digital reconstruction of the New Synagogue in Wroclaw**
Institute of Architecture, University of Applied Sciences in Mainz, Germany
3D-modeling and visualization based on historical sources and technical project coordination.

Teaching experience

07/2023-09/2023 **Tutor in workshop “DIGITAL 3D HERITAGE – Exploring 3D- Modelling in Education, Documentation and Dissemination.”**
European Workshop of CoVHer project in Mainz, Germany.

Support in 3D-modeling tasks and preparation 3D models for 3D print and Augmented Reality (AR) application.

- 05/2023-09/2023 **Tutor in seminar “Digital Reconstruction of wooden synagogues in Poland”**
Warsaw University of Technology together with Lodz University of Technology, Poland
Teaching methodology of reconstruction with focus on documentation, publication and dissemination of 3D models, support in 3D modeling tasks.
- 06/2022 **Guest tutor of 3D modelling for 3D printing workshop during seminar “Digital Reconstruction of wooden synagogues in Poland”**
Warsaw University of Technology
Teaching requirements of 3D models for 3D print in SLA technology, checking students work for 3D print.
- 05-06/2018 **Tutor of weekend workshop series “Architectural Rendering and Visualization”**
Hochschule Mainz – University of Applied Sciences
Teaching preparation of architectural model for visualization in ArchiCAD and renders postprocessing in Photoshop.

Conferences and workshops

- 06-07/2023 **‘Lillo 1640: methodology and workflow of virtual reconstruction’ by Time Machine Academy**
Series of workshops about 3D-reconstruction of Lilo’s fortress in 1640
- 03/2023 **3rd Workshop on ‘Research and education in urban history in the age of digital libraries’ in Munich**
Presentation 1: Bajena I. & Kuroczyński P., “Metadata for 3D Digital Heritage Models. In the Search of a Common Ground”
Presentation 2: Kuroczyński P., Bajena I. & Große P., “Digital Urban History Lab – Serious 3D in Research, Education and Popularization of Cultural Heritage”
- 11/2022 **27th International Conference on Cultural Heritage and New Technologies (CHNT 27) in Vienna**
Presentation: Bajena I., Dworak D., Smolarski R., Kuroczyński P. & Münster S., „DFG 3D-Viewer – Development of an infrastructure for digital 3D reconstructions. Use cases”
- 07/2022 **Online Conference ‘Digital Humanities 2022: RESPONDING TO ASIAN DIVERSITY’**
Presentation: Bajena I., Dworak D., Smolarski R., Kuroczyński P. & Münster S., „DFG 3D-Viewer – Development of an infrastructure for digital 3D reconstructions”
- 06/2022 **Symposium “Visualizing Cities: Analazing Fragmented History and a Built Future” in Padua**
Presentation: Bajena I. & Kuroczyński P., „Urban Histories Lab of Mainz”,
- 06/2022 **(IN)TANGIBLE HERITAGE(S): A conference on design, culture and technology – past, present, and future in Canterbury**
Presentation: Bajena I. & Kuroczyński P., „Development of the methodology and infrastructure for digital 3D reconstructions”
- 06/2022 **Workshop on Computational Methods in the Humanities 2022 (COMHUM 2022) in Lausanne**
Presentation: Bajena I., “Knowledge representations of digital reconstruction in 3D models”
- 03/2022 **14th Working Meeting of the Digital Reconstruction Working Group (Die Arbeitsgruppe Digitale Rekonstruktion – AGDR)**
Presentation: Münster S., Smolarski R., Bajena I. & Kuroczyński P., „DFG 3D-Viewer

- infrastructure for digital 3D reconstructions. Hands-on Survey: Investigation of the documentation, input mask and upload of the 3D models into a 3D repository”

11/2021

26th Conference on Cultural Heritage and New Technologies (CHNT 26) in Vienna

Presentation: Bajena I., Kuroczyński P., Münster S. & Apollonio F., „Metadata Scheme for 3D Models. How to capture source-based 3D reconstructions of cultural heritage?”

10/2021

28th Conference of the Working Group of German and Polish art historians and monument conservators in Mainz

Presentation: Kuroczyński P., Jara K. & Bajena I., “Synagoge am Anger im Kontext dreier Glaubensgemeinschaften – Digitale Rekonstruktion und Dokumentation der Breslauer Synagoge”

05/2018

Sacred architecture of Wroclaw: German-Polish workshop in Wroclaw

Participation in a workshop about 3D-modeling based on historical text, its visualization (3D print) and documentation in virtual research environment.

Funding and awards

07/2023

Best paper award of GEORES special session during 29th International CIPA Symposium in Florence

Awarded paper titled “Scientific Reference Model. Defining standards, methodology and implementation of serious 3D” was written together with Piotr Kuroczyński, Fabrizio Ivan Apollonio and Irene Cazzaro.

05/2021

Professor Jan Zachwatowicz Award

Honourable mention in International Professor Jan Zachwatowicz ICOMOS Competition for the best university graduation works in the academic year 2019/20.