




# Jacopo Mereu, Ph.D. Student

 9 Aug 1999, Cagliari, Italy

 jacopo.mereu.work@gmail.com

 HackerRank

 CG3HCI







 jacopo.mereu@unica.it



— *It's kind of fun to do the impossible* —  
*A/N: I changed my mind. It's not*

## Education



- 2023 – now  **Ph.D. Student Mathematics and Computer Science**, *University of Cagliari*, cycle XXXIX.  
Supervisor: Prof. Lucio Davide Spano.  
Scholarship: "Borsa di Studio a tema vincolato PNRR - M4C1 - Inv. 4.1 D.M. n. 118 del 2.3.2023"  
( SCHOLARSHIP)
- 2021 – 24/07/2023  **M.Sc. Computer Science**, *University of Cagliari*, 110/110 (with honors).  
Thesis title: *VMXR: A EUD Environment for Virtual Merchandizing in XR*.  
Supervisor: Prof. Lucio Davide Spano.  
( THESIS)
- 2019 – 22/07/2021  **B.Sc. Computer Science**, *University of Cagliari*, 110/110 (with honors).  
Thesis title: *Unit Testing per un ambiente editore di Realta' Virtuale*.  
Supervisor: Prof. Lucio Davide Spano.  
( THESIS)

## Research Experience

- Feb 2024 – July 2024  **Visiting at ISTI-CNR, Pisa, Italy**.  
Mentor: Res. Marco Manca.  
Project: EUD4XR

## Teaching & Tutoring Experience

### University of Cagliari

- 2 May 2024 – 9 May 2024  **Type.** Mini-Course.  
**Description.** Preparation of 2 laboratory lessons for the course *User Interface Technology* under the supervision of Prof. Lucio Davide Spano. The created material ( URL) introduces MRTK3 to Master's students. Taught 20+ students.

## Teaching & Tutoring Experience (continued)

Feb 2024 – June 2024

■ **Type.** Fixed-term contract.

**Winner of the competition.** Bando di selezione n. 5/2024 per l'affidamento, con contratto di lavoro autonomo di diritto privato, di n.36 incarichi di tutorato presso la Facoltà di Scienze – II semestre, A.A. 2023/2024 ([🔗 URL](#)).

**Object.** Tutoring Assignment - Second Semester A.Y. 2023/24 - DATA VISUALIZATION - IADA L31 - Announcement No. 5/2024 of January 19, 2024.

**Description.** Preparation of 11 laboratory lessons for the course *Data Visualization* under the supervision of Prof. Gianmarco Cherchi. The created material teaches data analytics students, who have no background in web programming, the fundamentals of web programming and how to use the d3.js library. The lab lessons involve teaching visualizations for tabular, chart, and spatial datasets. Taught 50+ students.

## Research Publications

### Conference Proceedings

- 1 A. Carcangiu, M. Manca, **J. Mereu**, C. Santoro, L. Simeoli, and L. D. Spano, “Conversational rule creation in xr: User’s strategies in vr and ar automation,” in *End-User Development*, C. Santoro, A. Schmidt, M. Matera, and A. Bellucci, Eds., Cham: Springer Nature Switzerland, 2025, pp. 59–79, ISBN: 978-3-031-95452-8. [🔗 URL: https://doi.org/10.1007/978-3-031-95452-8\\_4](https://doi.org/10.1007/978-3-031-95452-8_4).
- 2 **J. Mereu**, V. Artizzu, A. Carcangiu, *et al.*, “Empowering end-user in creating extended reality content with a conversational chatbot,” in *Engineering Interactive Computer Systems. EICS 2024 International Workshops*, Cham: Springer Nature Switzerland, 2025, pp. 126–137, ISBN: 978-3-031-91760-8. [🔗 URL: https://doi.org/10.1007/978-3-031-91760-8\\_9](https://doi.org/10.1007/978-3-031-91760-8_9).
- 3 V. Artizzu, A. Carcangiu, M. Manca, *et al.*, “End-user development for extended reality using a multimodal intelligent conversational agent,” in *Proceedings of the Workshop on Prototyping and Developing Real-World Applications of Extended Reality at the 17th International Conference on Advanced Visual Interfaces (Genoa, Italy)*, ser. CEUR Workshop Proceedings, 2024. [🔗 URL: https://iris.unica.it/handle/11584/404623](https://iris.unica.it/handle/11584/404623).
- 4 A. Menale, **J. Mereu**, C. Nuvole, L. Pannuti, E. M. Spano, and L. D. Spano, “Vmxr: A eud environment for virtual merchandizing in xr,” in *Joint Proceedings of the Workshops, Work in Progress Demos and Doctoral Consortium at the IS-EUD 2023 (WWDD at IS-EUD 2023)*, ser. CEUR Workshop Proceedings, 2023. [🔗 URL: https://iris.unica.it/handle/11584/382531](https://iris.unica.it/handle/11584/382531).

## Academic Service

### Conference Organizations

2025 ■ **Web Chair & SV** at *IUI'25*




2024 ■ **SV** at *EICS'24*

### Peer Reviews

2025 ■ **1 Demo and Work in Progress** for *IS-EUD'25*  
**2 Poster & Demo** for *IUI'25*



## Academic Service (continued)

### Mentoring Students

- 2025  **Andrea Congiu** (UniCA, BSc) – Project: *EUD4XR. Enhancing ECA Rules with Task Model Operators.*
- 2024  **Riccardo Senes** (UniCA, BSc) – Project: *EUD4XR. Implementation of a Virtual Museum Customizable by End Users.*
- 2023  **Marco Ladu & Micheal Bandino** (UniCA, BSc) – Project: *Atlantide. Tracking Livestock Data and Accessing It Through Mixed Reality Interfaces.*  
**Matteo Cadoni** (UniCA, BSc) – Project: *VMXR. Real-Time Rendering of 3D Assets in a Virtual Reality Environment.*

## Working Experience

### University of Cagliari

- Dec 2022 – June 2023  **Type.** Occasional.
- Winner of the competition.** Bando di selezione n. 15/2022 [Prot. n°252075 del 01/12/2022] per il conferimento di un contratto di lavoro autonomo nell'ambito del Progetto dal titolo: "ECARules4All" - responsabile scientifico prof. Lucio Davide Spano ( URL).
- Object.** Implementation of a prototype for the configuration and definition of interactions for product exhibitions in virtual reality.
- Description.** As part of a collaborative 6-month project between the University of Cagliari (Department of Mathematics and Computer Science) and the company "Avvale". The task was to make a Proof of Concept (POC) for assessing the feasibility of an End-User Development (EUD) tool facilitating graphic materials' exhibition (Visual Merchandising) within virtual environments, empowered with dynamic interactions expressed by Event-Condition-Action (ECA) rules written in natural language. To create an immersive virtual experience, a workflow involving three key roles was identified: developer, environment configurator, and experience configurator (or end-user). The developer handles the logic behind the interactions supported by the system and inserts the resources used by the configurators, such as multimedia files and 3D models. The environment configurator is responsible for designing the generic content (template), i.e., creating the planimetry and furnishing it with generic furniture pieces. Finally, the experience configurator tailors the immersive experience to their specific needs by refining the content of a template and specifying the interactions by defining the ECA rules. Unity, React, Node.js, MRTK Version 2, and ECARules4All are major technologies in building the high-fidelity prototype.

## Working Experience (continued)

### FIS Global

June 2017 – July 2017

■ **Type.** School-Work alternance.

**Object.** Development of Company internal scripting tools.

**Description.** During this experience, my colleague and I worked on scripts for internal use within the company. The main task was to code a Python script to automate the comparison of SQL tables with the same schema, which had been exported to Excel sheets at different times. The objective was to identify the differences between the two Excel files, highlight them, and generate the SQL code enabling the transition from the 1<sup>st</sup> version to the 2<sup>nd</sup> version of the file. Furthermore, two other secondary tasks were (1) devising a Disaster Recovery (DR) plan for a Tokyo server using Amazon RDS, and (2) developing a Python script to determine the availability of a product for purchase (which involved checking local market holidays).



## Skills

Languages	■ Italian (Native language): Proficient level. English: Conversational level.
Coding	■ C#, Java, Python, SQL, ...
Databases	■ MySQL, PostgreSQL, MongoDB, OrientDB.
Web Dev	■ HTML, CSS, JavaScript, React, Node.js.
Misc.	■ Problem-solving, attention to detail, consultation.

## Miscellaneous Experience

### Certification

Dec 2021 ■ **Certified Level B2 in English.** Awarded by Progetto CLA Cagliari (  URL ).

Aug 2024 ■ **Vodafone LV8.** Digital Skills (  URL ) + Programmer Skills (  URL )

## References

Available on Request