

I aim to bridge recommender systems with Data Humanism through a multidisciplinary approach that combines explanatory AI, information visualization, and human-computer interaction. Through my research, I develop user interfaces that transform complex algorithmic processes into contextually relevant, emotionally resonant experiences, enabling non-expert users to engage with their own data and understand AI-driven recommendations.

Education

Ph.D. in Computer Science , University of Zurich, Switzerland	Expected Graduation June 2026
Thesis: Humanizing recommender systems - Interactive and explanatory recommendations through Data Humanism	
Supervisors: Jürgen Bernard (UZH) and Mennatallah El-Assady (ETHZ)	
Committee: Katrien Verbert (KU Leuven), Paolo Ciuccarelli (Northeastern University), Dominik Moritz (Apple and CMU)	
Exchange at University of Maastricht, Netherlands under the supervision of Nava Tintarev	2025
M.Sc. in Computational Data Science , Free University of Bozen-Bolzano, Italy	2021
Thesis: Brickable - An NLP pipeline for LEGO-centered forum analysis	
Exchange fall semester at University of Helsinki, Finland	2020
B.Sc. in Biomedical Engineering , University of Bologna, Italy	2019
Thesis: Analysis of next-generation wearable devices to support epilepsy patients	

Research experience

Research Assistant, University of Zurich, Switzerland Feb 2022 to Present

- Led a hands-on workshop engaging 20 participants to collect quantitative and qualitative data on recommender system usage patterns and the role of explanation in recommendations.
- Designed and executed online experiments focusing on diverse aspects of explainable recommender systems, spanning ethical considerations, user interface preferences, and explanation preferences.
- Analyzed quantitative and qualitative data from various research initiatives.
- Providing mentorship and guidance to students undertaking semester projects and master's theses.

Selected Publications

[Google Scholar](#)

- A Critical Reflection on the Values and Assumptions in Data Visualization*** Shehryar Saharan, [Ibrahim Al-Hazwani](#), Miriah Meyer, Laura Garrison - ACM CHI (2026)
- HUMMUS: A Human-Centered Approach to Sequential Recommendation Explainability through Data Humanism*** [Ibrahim Al-Hazwani](#), Matthias Mylaeus, Daniela Mormocea Jürgen Bernard, Lorenzo Porcaro - ACM RecSys Music Recommender Systems Workshop (2025)
- Data Humanism Decoded: A Characterization of its Principles to Bridge Data Visualization Researchers and Practitioners*** [Ibrahim Al-Hazwani](#), Ke Er Zhang, Laura Garrison, Jürgen Bernard - *IEEE VIS* (2025)
- Blooming Beats: An Interactive Explainable Recommender System for Exploring Personal Music Narratives through Data Humanism Principles*** [Ibrahim Al-Hazwani](#), Oliver Aschwanden, Daniel Lutziger, Carlos Kirchdorfer, Luca Huber, Nimra Ahmed, Anton Fedosov, Jürgen Bernard - 🏆 *ACM CHIItaly Pictorial Track* (2025)
- f-RecX: A Framework for Designing Effective Textual Explanations in Recommender Systems' User Interfaces*** [Ibrahim Al-Hazwani](#), Gabriela Morgenshtern, Mennatallah El-Assady, Jürgen Bernard - *International Journal of Human-Computer Studies* (2025)
- Towards Personal Explanations for Recommender Systems: A Study on the Impact of Familiarity and Urgency*** [Ibrahim Al-Hazwani](#), Nimra Ahmed, Mennatallah El-Assady, Jürgen Bernard - *NordiCHI LBW* (2024)
- ScrollyPOI: A Narrative-Driven Interactive Recommender System for Points-of-Interest Exploration and Explainability*** [Ibrahim Al-Hazwani](#), Tiantian Luo, Oana Inel, Francesco Ricci, Mennatallah El-Assady, Jürgen Bernard - *ACM UMAP Workshop on Explainable User Models and Personalised Systems* (2024)

Teaching experience

Teaching Assistant in Seminar Interactive Visual Data Analysis , University of Zurich	2025
Teaching Assistant in Fundamental of Web Engineering , ETH Zürich, Switzerland	2023, 2024
Teaching Assistant in Human-Computer Interaction in AI , University of Zurich, Switzerland	2023, 2025
Teaching Assistant in Fundamental of People Oriented Computing , University of Zurich, Switzerland	2023
Teaching Assistant in Interactive Machine Learning , ETH Zürich, Switzerland	2023, 2024
Teaching Assistant in Interactive Visual Data Analysis , University of Zurich, Switzerland	2022, 2023, 2024

Supervision

Semester Project Yanick Bachmann (ETHZ) - <i>An interactive gentrification explorer through the lenses of Data Humanism (2026)</i>	
Master's Thesis Luca Huber - <i>IKEA story living: Explainable furniture recommendation through Data Humanism (2025)</i>	
Master's Thesis Yuqing Huang - <i>Interactive and explainable outfit recommendation (2025)</i>	
Semester Project Berasneu Viachaslau, Eun Ji Lee, Vinarskis Glebs, Kasinska Natalia - <i>Advancing ScrollyPOI for multicity explainable and contextual recommendations (2025)</i>	
Master's Thesis Oliver Aschwanden - <i>Conversational AI-mediated Explainable Group Recommendations (2024)</i>	
Semester Project Sarah Egger, Yuqing Huang, Jerome Maier, Daniela Mormocea, Matthias Myleus - <i>Visualization and explaining sequential song recommendation through Data Humanism (2024)</i>	
Semester Project Oliver Aschwanden, Daniel Lutziger, Carlos Kirchdorfer, Luca Huber - <i>Towards personal, contextualized, and interactive song recommendation through Data Humanism (2024)</i>	
Master's Thesis Tiantian Luo - <i>Interactive and Explainable POI recommender systems (2024)</i>	
Master's Thesis Turki Alahmadi - <i>An interactive tool for explaining matrix factorization movie recommendations (2023)</i>	
Semester Project Tiantian Luo and Jing Duanran - <i>An interactive explainable AI approach for item ranking (2023)</i>	
Master's Thesis Maximilian Tornow - <i>Item-based ranking creation (2022)</i>	

Grant

DSI Excellence Program (4-year PhD scholarship), 195'660 CHF

Work experience

Data Scientist (Master's Thesis) , the LEGO Group, Remote	Feb 2021 to July 2021
<ul style="list-style-type: none">Conducted comprehensive data collection, processing, and analysis of over 100,000 comments extracted from LEGO-focused online forums using Python.Designed and implemented a Python-based NLP pipeline featuring a 3-class sentiment classifier, surpassing the initial 0.26 baseline by achieving a 0.57 accuracy on unlabelled data.Introduced a novel interactive data visualization approach for sentence-level sentiment analysis utilizing Plotly, enhancing the granularity and interpretability of sentiment insights.	
Data Engineer Intern , Humanitas Research Hospital Rozzano, Italy	May 2019 to Sept 2019
<ul style="list-style-type: none">Created 30 reports utilizing SAP BO and crafted five interactive dashboards featuring multiple charts through Tableau.Addressed more than 15 business queries from hospital stakeholders by executing SQL queries on relational databases.Developed a data warehouse with SAP Data Service for a 5-member data science team, handling and processing over 1 TB of medical data.	
UI/UX Developer , Apple Developer Academy Naples, Italy	Sept 2017 to June 2018
<ul style="list-style-type: none">Leveraged the Challenge-Based Learning methodology to explore and craft iOS applications to address societal issues.Employed A/B testing techniques to assess and optimize user interface and interaction strategies for enhanced UX.Participated with Apple Evangelists in sessions about critical thinking, presentation skills, and cross-team collaboration.	

Invited Talks

Guest lecturer for the UZH Human-Computer Interaction in AI Course Explainable AI	2025
Speaker at Swiss Pint of Science In a world of AI be human: what can we learn from Data Humanism and apply to explain recommender systems	2024
Invited seminar speaker in the UZH Social Computing Group Humane Interactive Explainable AI for Recommender Systems	2024
Guest lecturer for the UZH Interactive Visual Data Analysis Course Humane Interactive Explainable AI for Recommender Systems	2023
Guest lecturer for the UZH Interactive Visual Data Analysis Course Explainable AI for RecSys	2022
Speaker at the UZH Oerlikon Lecture Series The role of XAI in supporting users in the digital world	2022

Reviewer

ACM IUI 2026
IEEE VIS 2023, 2024
ACM DIS 2025
ACM CHI 2025
Eurographics 2023, 2024
VINCI, 2025

Volunteering

Program Committee VINCI, Linz, Austria, 2025
Student Volunteer ACM Conference on Recommender Systems, Bari, Italy, 2024
Student Volunteer Eurographics Visualization Conference, Odense, Denmark, 2024
Student Volunteer Information+ Conference, Edinburgh, Scotland, 2023
Student Volunteer ACM Conference on Human Factors in Computing Systems, Hamburg, Germany, 2023
Online Student Volunteer ACM Conference on Recommender Systems, Seattle, USA, 2022
Publicity Chair (Substitute) Eurographics Visualization Conference, Rome, Italy, 2022

Skill

Python (pandas, numpy, scikit-learn, matplotlib, seaborn, plotly, scrapy), PyTorch, Jupyter Notebook, R (dplyr, tidyverse, ggplot), SQL, HTML, CSS, Javascript (D3.js, Svelte), Git, Figma, Adobe Suite (Illustrator, InDesign)