



David Massimo

Curriculum Vitae

Short Bio

David Massimo is a researcher (*Assegnista di ricerca*) at the the Faculty of Computer Science of the Free University of Bozen-Bolzano. He got a PhD in Computer Science *with distinction* for his thesis entitled “Exploiting Explainable and Generalized Human Behaviour Models for Recommendation”. His research activity focuses on Recommender Systems and Decision-Support. He published the outcome of his work in international conferences like ACM RecSys, ACM IUI and UMAP. Massimo received two best paper awards from the IFITT federation for his research contribution to eTourism. Moreover, the recommendation technology that Massimo has developed during his PhD has been industrialized and actively used in real scenarios.

Education

2016–2019 **PhD in Computer Science**, *Free University of Bozen-Bolzano*, Italy.

Title: *Exploiting Explainable and Generalized Human Behaviour Models for Recommendation (discussed on 6/12/2020)*

Supervisor: *Prof. Francesco Ricci*

Commission members: *Prof. Alejandro Bellogin, (Universidad Autónoma de Madrid), Dr. Wolfgang Wörndl, (Technische Universität München), Prof. Francesco Ricci (Free University of Bozen-Bolzano)*

Grade: *Awarded with distinction*

2014–2016 **Master of Science in Computer Science**, *Free University of Bozen-Bolzano*, Italy.

Title: *Personalised Food Recommendation*

Grade: *110/110 cum laude*

2011–2014 **Bachelor of Science in Computer Science and Engineering**, *Free University of Bozen-Bolzano*, Italy.

Title: *Mobile Food Recommender System for Health Improvement*

Teaching

- 2021 **Recommender Systems (lab)**, *Free University of Bozen-Bolzano*.
- 2017-2021 **Computer Programming (lab)**, *Free University of Bozen-Bolzano*.

Other academic activities

During my academic career, I have been a Program Committee member of international conferences and workshops. Some of them includes: ACM Conference on User Modeling Adaptation and Personalization (UMAP 2019-2021); ACM Conference on Recommender Systems (RecSys 2019-2020); Workshop on Intelligent User Interfaces for Internet of Things (IUIoT - 2019); Conference on Information and Communication Technologies in Tourism (ENTER 2020-2021). I have been a reviewer for international journals as Personal and Ubiquitous Computing; User Modeling and User-Adapted Interaction; International Journal of Geographical Information Science; Behaviour & Information Technology.

I served as Research Track co-chair for the Conference on Information and Communication Technologies in Tourism ENTER22.

Awards

- 2020 International Federation for IT and Travel & Tourism IFITT - Best Paper
- 2019 International Federation for IT and Travel & Tourism IFITT - Best Paper

Work experience

- 2019–Present **Assegnista di Ricerca (Assistant researcher)**, *Free University of Bozen-Bolzano, Italy*.

Currently, I am continuing my research on Recommender Systems in sensor-augmented environments with applications in mass-market retail and factory settings (industry fundings).

- 2018–2019 **Consulting services**.

I provided professional consulting and prototyping services to companies operating in the tourism domain that wanted to deploy interactive recommendation technologies in sensor-augmented spaces (e.g., museums).

- 2016–2019 **PhD in Computer Science**, *Free University of Bozen-Bolzano, Italy*.

My research work was mainly focused on devising Recommender System technologies that bridge offline and online user behaviour to support users while they are, e.g., exploring a physical environment. I've devised recommendation strategies based on Inverse Reinforcement Learning; a novel approach in the Recommender System community. I focused on case studies on tourism domain that lead to the industrialization of the developed technologies.

- 2014–2016 **Research Assistant**, *Free University of Bozen-Bolzano, Italy*.

As a research collaborator with contract, I contributed to an internal funded project by developing a novel Human Computer Interaction for a mobile Food Recommender System. Moreover, I devised collaborative filtering and content-based recommendation technologies tailoring the problem of nutrition and health.

Languages

Italian	Mother tongue
English	Working Proficiency
German	Intermediate

Work as Editor

- 2022 **Information and Communication Technologies in Tourism 2022: Proceedings of the ENTER 2022 eTourism Conference, January 11-14, 2022**, Jason L. Stienmetz, Berta Ferrer-Rosell, David Massimo, Springer Nature, ISBN 9783030947514, 507 pages.

List of Publications

- 2022 **Building Effective Recommender Systems for Tourists**, David Massimo, Francesco Ricci, *AI Magazine (to appear)*.
- 2021 **Popularity, Novelty and Relevance in Point of Interest Recommendation: an Experimental Analysis**, David Massimo, Francesco Ricci, *Journal of Information Technology and Tourism*.
- 2021 **Next-POI Recommendations Matching User's Visit Behaviour**, David Massimo, Francesco Ricci, *Conference on Information and Communication Technologies in Tourism (ENTER 2021)*.
- 2021 **Challenges for Recommender Systems Evaluation**, Francesco Ricci, David Massimo, Antonella De Angeli, *14th Edition of the Biannual Conference of the Italian SIGCHI Chapter (CHIItaly 2021)*.
- 2020 **Next-POI Recommendations for the Smart Destination Era (Best Paper)**, David Massimo, Francesco Ricci, *Conference on Information and Communication Technologies in Tourism (ENTER 2020)*, Guildford, UK.
- 2020 **Enhancing Travel Experience Leveraging on-line and off-line Users' Behaviour Data**, David Massimo, Francesco Ricci, *25th International Conference on Intelligent User Interfaces (IUI2020)*, Cagliari, Italy.
- 2019 **Tangible Decision-making in Sensors Augmented Spaces**, David Massimo, Francesco Ricci, *18th International Conference of the Italian Association for Artificial Intelligence (Discussion paper)*, Rende, Italy.
- 2019 **Clustering Users' POIs Visit Trajectories for Next-POI Recommendation (Best Paper)**, David Massimo, Francesco Ricci, *Conference on Information and Communication Technologies in Tourism (ENTER 2019)*, Nicosia, Cyprus.
- 2018 **Harnessing a generalised user behaviour model for next-POI recommendation**, David Massimo, Francesco Ricci, *12th ACM Conference on Recommender Systems (RecSys 2018)*, Vancouver, Canada.

Piazza Domenicani, 3 – Bolzano, Italy
✉ davmassimo@unibz.it

- 2018 **User Behaviour Analysis in a Simulated IoT Augmented Space**, *David Massimo, Elena Not, Francesco Ricci*, 23rd International Conference on Intelligent User Interfaces (IUI 2018), Tokyo, Japan.
- 2018 **User Preference Modeling and Exploitation in IoT Scenarios**, *David Massimo*, 23rd International Conference on Intelligent User Interfaces (IUI 2018), Tokyo, Japan.
- 2018 **Sequential Recommendations in IoT Scenarios with a Generalized User Behaviour Model**, *David Massimo, Francesco Ricci*, 9th Italian Information Retrieval Workshop (IIR 2018), Rome, Italy.
- 2018 **Tangible Tourism with the Internet of Things**, *Dario Cavada, Mehdi Elahi, David Massimo, Stefano Maule, Elena Not, Francesco Ricci, Adriano Venturini*, Conference on Information and Communication Technologies in Tourism (ENTER 2018), Jönköping, Sweden.
- 2017 **Learning User Preferences by Observing User-Items Interactions in an IoT Augmented Space**, *David Massimo, Mehdi Elahi, Francesco Ricci*, 25th ACM International Conference on User Modeling, Adaptation, and Personalization (UMAP 2017), Bratislava, Slovakia.
- 2017 **Item Contents Good, User Tags Better: Empirical Evaluation of a Food Recommender System**, *David Massimo, Mehdi Elahi, Francesco Ricci, Mouzhi Ge*, 25th ACM International Conference on User Modeling, Adaptation, and Personalization (UMAP 2017), Bratislava, Slovakia.
- 2015 **Integrating Wearable Devices into a Mobile Food Recommender System**, *Mouzhi Ge, David Massimo, Francesco Ricci, Floriano Zini*, 7th International Conference on Mobile Computing, Applications and Services (MobiCASE 2015), Berlin, Germany.
- 2015 **Health-aware Food Recommender System**, *Mouzhi Ge, Francesco Ricci, David Massimo*, 9th ACM Conference on Recommender Systems (RecSys 2015), Vienna, Austria.
- 2015 **Using Tags and Latent Factors in a Food Recommender System**, *Mouzhi Ge, Mehdi Elahi, Ignacio Fernández-Tobías, Francesco Ricci, David Massimo*, 5th International Conference on Digital Health 2015 (DigitalHealth 2015), Pisa, Italy.
- 2015 **Interaction Design in a Mobile Food Recommender System**, *Mehdi Elahi, Mouzhi Ge, Francesco Ricci, Ignacio Fernández-Tobías, Shlomo Berkovsky, David Massimo*, Workshop on Interfaces and Human Decision Making for Recommender Systems co-located with ACM Conference on Recommender Systems (IntRS 2015@RecSys 2015), Vienna, Austria.
- 2014 **Interactive Food Recommendation for Groups**, *Mehdi Elahi, Mouzhi Ge, Francesco Ricci, David Massimo, Shlomo Berkovsky*, 8th ACM Conference on Recommender Systems (RecSys 2014), Foster City, USA.

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