

# Riccardo Marin, Ph.D.

---

## Contact:

- [riccardo.marin@tum.de](mailto:riccardo.marin@tum.de)
- <https://riccardomarin.github.io/>
- Boltzmannstrasse 3, 85748 Garching
- Germany

## Personal details:

- Place of birth: *Verona, Italy*
- Date of birth: *24 September 1991*
- Citizenship: *Italian*
- Native Language: *Italian*
- Spoken Languages: *English (fluent), German (basic)*

Curriculum Vitae - **August 28, 2025**

---

## Research Interests

- 3D Geometry Processing, Shape Matching and Registration, Virtual Humans, Spectral shape Analysis, Geometric Deep Learning, Virtual Reality, Artificial Intelligence, Computer Graphics, Computer Vision.

## Research Profile

*I am a researcher and Professor at the [Computer Vision Group](#) of the Technical University of Munich (TUM), led by Prof. Daniel Cremers. Previously, I was a postdoc funded by a Humboldt and a Marie Skłodowska-Curie Post-Doctoral Fellowships at the University of Tübingen in the [Real Virtual Humans](#) group, and a post-doc at Sapienza University of Rome in the [GLADIA](#) group. I followed the University of Verona's Ph.D program in Computer Science, collecting a Best PhD Thesis award by EG-Italy. I work on Spectral Shape Analysis, Shape Matching Geometric Deep Learning, and Virtual Humans. My work appeared in top-level conferences and journals (NeurIPS, IJCV, CVPR, ICCV, ECCV, CGF) and collected prestigious awards (Best Student Paper 3DV20, Top Cited CGF 2020-21, Best paper at NeurReps Workshop). I served as a conference organizer (RCD Committee at SIGGRAPH, Volunteer Chair at 3DV18 and STAG21), as Associate Editor (AI Communications Journal), as an Area Chair (NeurIPS), and as a reviewer for several journals and conferences (PAMI, TCVG, CVPR, NeurIPS, ICLR, ICML), obtaining six Outstanding Reviewer Awards. I am a member of the European Lab for Learning and Intelligent Systems (ELLIS), and I got the Italian professorship habilitations (ASN) for Computer Science (01/B1) and Information Engineering (09/H1).*

---

## Academic Appointments

- **Technical University of Munich**, Germany - Machine Learning Center Munich 14/07/2025 – present  
**Interim Professor (Vertretungsprofessor - W2);**  
Professorship for Machine Learning for Robotics
  - **Technical University of Munich**, Germany - Machine Learning Center Munich 01/11/2024 – 13/07/2025  
**Post-doctoral researcher;**  
Advisor: Prof. Daniel Cremers
  - **University of Tübingen**, Germany - Computer Science department 01/08/2023 – 31/07/2024  
**European (Post-doctoral) researcher, MSCA-PF Fellowship** (12 months);  
Advisor: Prof. Gerard Pons-Moll
  - **University of Tübingen**, Germany - Computer Science department 01/07/2022 – 31/06/2023  
**Post-Doctoral researcher, Humboldt Foundation Fellowship** (12 months);  
Advisor: Prof. Gerard Pons-Moll
  - **Sapienza University of Rome**, Italy - Computer Science department 04/2021 – 04/2023  
**Contract/Adjunct Professor**  
Algorithm Design Course (Exerciser and member of the Exam Committee)
  - **Sapienza University of Rome**, Italy - Computer Science department 12/2020 – 06/2022  
**Post-Doctoral researcher;**  
Advisor: Prof. Emanuele Rodolà
  - **École Polytechnique (FRA)**, France - Computer Science department 09/2019 – 03/2020  
**Visiting Student;**  
Advisor: Prof. Maks Ovsjanikov
-

## Fellowships and Memberships

- **ELLIS - Munich Unit** 15/08/2025 – present  
Faculty
  - **ELLIS - European Lab for Learning and Intelligent Systems** 15/05/2023 – present  
Member
  - **Marie Curie Alumni** 2023 – present  
Member
  - **Marie Skłodowska-Curie Action HORIZON 2021-2027** 2023 – 2024  
Postdoctoral Research Fellow
  - **Alexander von Humboldt Foundation** 2022 – 2023  
Postdoctoral Research Fellow
- 

## Education

- **ICVSS Summer School**, Italy, University of Catania 07/07/2025 – 11/07/2025  
Summer School on Computer Vision for Spatial Intelligence
  - **University of Verona**, Italy – Computer Science department 1/10/2017 – 10/06/2021  
Ph.D in Computer Science *with the additional label of Doctor Europeus*.  
(with MIUR scholarship; concluded without extension requests)  
Thesis: *Merging, extending and learning representations for 3D shape matching*.  
Advisor: Umberto Castellani  
Examiners: Alex Bronstein (Technion), Tobias Schreck (Graz University), Stefanie Wuhler (INRIA Grenoble)  
Reviewers: Alex Bronstein (Technion), Stefanie Wuhler (INRIA Grenoble)  
**Awarded Best PhD Thesis in Computer Graphics by Italian Chapter of Eurographics (EG-Italy)**
  - **Polytechnic University of Milan**, Italy – Computer Science department 07/2020  
Attendance at Graduate School on Machine Learning for Non-Matrix Data
  - **University of Milan**, Italy – Computer Science department 05/2019  
Attendance at Graduate School at Symposium on Geometry Processing 2019 (SGP).
  - **University of Brescia**, Italy – Computer Science department 10/2018  
Attendance at International School on Graphics and Geometry Processing for Digital Manufacturing (EGIT) at Italian Chapter of Eurographics (STAG).
  - **Alberta University**, coursera.org 01/2021 – 04/2021  
Reinforcement Learning Specialization; held by Prof. Marta White and Prof. Adam White  
[Certificate](#)
  - **Stanford University**, coursera.org 08/2017 – 07/2018  
Deep Learning Specialization; held by Prof. Andrew Ng  
[Certificate](#)
  - **University of Verona**, Italy 2013 – 2017  
Laurea Specialistica Degree (2 years degree, M.S. equivalent) in Computer Science and Engineering.  
Thesis: *Augmented Reality for training of pretend play in children with Autism Spectrum Disorder*.  
Grade: 103/110
  - **University of Verona**, Italy 2010 – 2013  
Laurea Degree (3 years degree, B.S. equivalent) in Computer Science.  
Grade: 101/110
- 

## Professional Activities / Academic Service

- **Associate Editor** 06/2024-present  
AI Communications, journal on Artificial Intelligence.
- **Session Chair** 2023, 2024  
IMPRS-IS Interview Symposium at Max Planck Intelligent-Systems, Tübingen (Germany).

- **Volunteers Chair** 12/2021  
STAG 2021, Smart Tools and Applications in Graphics, *Roma, Italy*.
- **Committee Member** 08/2021  
SIGGRAPH Research Career Development Committee, *Tokyo, Japan (remotely)*.
- **Invited Mentor** 05/2021  
International Conference on Learning Representations (ICLR) 2021, *Virtual*.
- **SHREC19 Challenge Track Organizer** 02/2019  
Eurographics 2019 Workshop on 3D Object Retrieval, *Genova, Italy*.  
Track: Correspondence in Humans with Different Connectivity.  
[Web site](#)
- **Volunteers Chair** 09/2018  
3DV 2018, International Conference on 3D Vision, *Verona, Italy*.
- **Volunteer Student**  
ICCV 2017, *Venice, Italy*.  
Eurographics 2019, *Venice, Italy*.
- **High School advanced-class in Computer Skills Teacher** 11/2012 – 05/2013  
ITCS Aldo Pasoli, *Via Girolamo dalla Corte, 15 - 37131 Verona, Italy*.
- **Computer literacy course Teacher** 11/2012 – 05/2013  
ITCS Aldo Pasoli, *Via Girolamo dalla Corte, 15 - 37131 Verona, Italy*.
- **Meta-Reviewer/Area Chair (Conferences)**
  - The Thirty-Ninth Annual Conference on Neural Information Processing Systems (NeurIPS), 2025
  - International Conference on Image Analysis and Processing (ICIAP); 2025
  - UniReps (NeurIPS Workshop); 2024
  - ICLR (TinyPapers Track); 2023
- **Reviewer (Conferences)**
  - BMVC; 2018
  - 3DV; 2019 - 2025
  - GMDL; 2019
  - NeurIPS; 2020 - 2024
  - ICLR; 2021 - 2025
  - AAAI; 2021
  - CVPR; 2021 - 2025
  - ICML; 2021 - 2024
  - 3DOR; 2021, 2022, 2025
  - MVA; 2021
  - ICCV; 2021, 2023, 2025
  - Siggraph ASIA; 2021, 2023
  - Siggraph; 2024
  - EuroGraphics; 2022
  - WACV; 2022
  - ECCV; 2022, 2024
  - ICIAP; 2023
  - TinyPapers (ICLR Track); 2023, 2024
  - LoG; 2023
  - ACL Rolling Review; 2024
  - UniReps; 2023
  - Pacific Graphics; 2025
  - Behavioral ML (NeurIPS workshop); 2024
- **Reviewer (Journals)**
  - IEEE Transactions on Pattern Analysis and Machine Intelligence (PAMI)
  - IEEE Transactions on Computer Visualization and Computer Graphics (TVCG)
  - International Journal of Industrial Ergonomics
  - Computer and Graphics Journal (C&G)
  - International Journal of Computer Vision (IJCV)

- IEEE/CAA Journal of Automatica Sinica
  - Journal of Imaging
  - IEEE Transactions on Image Processing
  - IEEE Transactions on Circuits and Systems for Video Technology
  - Neural Processing Letters
- 

## Teaching

- From Points to Avatars: Processing 3D Data at the time of Metaverse** 29/05/2025  
*Lecturer; University of Genoa, Computer Science Workshop.*  
Teaching responsibility: ~2 hours, *Genoa, Italy.*
- 3D Shape Analysis and Virtual Humans Applications (Master Practical Course)** 04/2025 - 10/2025  
*Lecturer and organizer; TUM School of Computation, Information and Technology.*  
Teaching responsibility: ~10 hours, *Munich, Germany.*
- 3D Shape Matching and Application in Computer Vision (Master Seminar)** 10/2024 - 01/2025  
*Lecturer and organizer; TUM School of Computation, Information and Technology.*  
Teaching responsibility: ~4 hours, Attendance: ~10, *Munich, Germany.*
- Virtual Humans** 10/2023 - 02/2024  
*Teaching Assistant; Exerciser, M.Sc. in Machine Learning, University of Tuebingen.*  
Teaching responsibility: 10 hours, Attendance: ~30, *Tuebingen, Germany.*
- Geometry processing and machine learning for geometric data** 23/11/2023 - 28/11/2023  
*Lecturer and organizer; Doctoral School at Bicocca University of Milan.*  
Teaching responsibility: 12 hours, *Milan, Italy.*
- Functional Correspondence from Discrete Geometry to Learning** 01/07/2023  
*Lecturer and organizer; at the Graduate School of the Symposium on Geometry Processing 2023.*  
Teaching responsibility: 1 hour, *Genoa, Italy.*
- Tutorial on Inverse Computational Spectral Geometry** 23/05/2022  
*Lecturer and organizer; at ICIAP 2021.*  
Length: 4 hours, Attendance: ~30, *Lecce, Italy.*
- Tutorial on Inverse Computational Spectral Geometry** 25/04/2022  
*Lecturer and organizer; at EuroGraphics 2022.*  
Length: 4 hours, Attendance: ~180, *Reims, France.*
- Numerical methods for Computer Science** 02/2022 - 04/2023  
*Teaching Assistant; Lecturer and Exerciser, M.Sc. in Computer Science, Sapienza University of Rome.*  
Teaching responsibility: 20 hours, Enrollment: ~10 students, *Roma, Italy.*
- Algorithm Design** 02/2022 - 04/2023  
*Adjunct Professor; Exerciser and member of the Exam Committee, M.Sc. in Computer Science, Sapienza University of Rome.* Teaching responsibility: 24 hours, Enrollment: ~100 students, *Roma, Italy.*
- Course on Data Science for High-School** 01/02/2021 - 07/02/2021  
*Teacher and organizer; School-work learning programme with CD: 50/50 association at the High School Morgagni.*  
Teaching responsibility: 40 hours, Attendance: 26, *Rome, Italy.*
- Tutorial on Spectral Geometry in Practice** 30/11/2021  
*Lecturer and organizer; at the International Conference on 3D Vision 2021.*  
Length: 4 hours, Attendance: ~250, *London, United Kingdom.*
- Algorithm Design** 04/2021 - 04/2022  
*Adjunct Professor; Exerciser and member of the Exam Committee, M.Sc. in Computer Science, Sapienza University of Rome.* Teaching responsibility: 24 hours, Enrollment: ~100 students, *Roma, Italy.*
- Spectral Shape Analysis for 3D matching** 06/2020  
*Lecturer and Organizer, Ph.D. School in Computer Science, University of Verona, Algorithm Design.* Teaching responsibility: 6 hours, Enrollment: ~20 students, *Verona, Italy.*

- **Pattern Recognition** 03/2019 – 06/2019  
Tutor student, Master degree in Computer Science and Computer Engineering, University of Verona. Verona, Italy.
- **Image Processing II** 11/2018 – 02/2019  
Tutor student, Master degree in Computer Science and Computer Engineering, University of Verona. Verona, Italy.
- **Introduction to Programming** 03/2018 – 06/2018  
Tutor student, Bachelor degree in Bioinformatics, University of Verona. Verona, Italy.

---

## Honors and Awards

- **Italian Habilitation as Associate Professor in Computer Science.** 07/2024  
01/B1
- **Italian Habilitation as Associate Professor in Information Processing Systems** 07/2024  
09/H1
- **Best paper in Topology and Graphs Category** 16/12/2023  
at NeurIPS 2023 Workshop on Symmetry and Geometry in Neural Representations (NeurReps);  
3 awarded papers out of 65.  
Paper title: *Spectral Maps for Learning on Subgraphs*
- **Outstanding Reviewer Award** 2023  
at The Conference on Neural Information Processing Systems (NeurIPS 2023)
- **Matteo Dellepiane Award for Best PhD Thesis in Computer Graphics** 18/11/2022  
at the Italian Chapter of EuroGraphics (EG-Italy)
- **Outstanding Reviewer Award** 2022  
at The Conference on Neural Information Processing Systems (NeurIPS 2022)
- **Outstanding Reviewer Award** 2022  
at The IEEE / CVF Computer Vision and Pattern Recognition Conference (CVPR 2022)
- **Top Cited Article 2020-2021 Award** 2022  
Computer Graphics Forum Journal  
Paper title: *FARM: Functional Automatic Registration Method for 3D Human Bodies*
- **Outstanding Reviewer Award** 2021  
at the International Conference on 3D Vision (3DV 2021)
- **Outstanding Reviewer Award** 2021  
at the International Conference on Learning Representations (ICLR 2021)
- **Best Student Paper Award** 2020  
at the International Conference on 3D Vision (3DV 2020); (3 best papers awards out of 123 papers)  
Paper title: *Instant recovery of shape from spectrum via latent space connections*
- **Outstanding Reviewer Award** 2020  
at the International Conference on 3D Vision (3DV 2020)
- **Best Poster in Computer Science** 07/05/2018  
at the University of Verona's PhD Day Event  
Poster title: *FARM: Functional Automatic Registration Method for 3D Human Bodies*

---

## Funding and Grants

- **Marie Skłodowska-Curie Post-Doctoral Fellowship (MSCA-2022-PF-EF)** 01/08/2023 - 01/08/2024  
Project: CoMBo - Correspondence through Millions Bodies: a large-scale, functional, and implicit data-driven method for 3D Humans matching (ID: 101109330)  
Funding: European Commission HORIZON 2021-2027. (~87K€)  
Role: **Fellowship Holder (Researcher)**  
Host: Prof. G. Pons-Moll; 12 months
- **Alexander von Humboldt Postdoctoral Fellowship** 01/07/2022 - 30/06/2023  
Project: Functional shape matching for implicit representations  
Funding: Alexander von Humboldt Foundation (~36K€)  
Role: **Fellowship Holder**  
Host: Prof. G. Pons-Moll; 12 months

- **Sapienza Research Starting Grant 2022 - Type 2** 24/10/2022  
Project: "Functional shape matching for implicit representations"  
Funding: Sapienza University of Rome (~2.3K€)  
Role: **Principal Investigator**; 12 months
- **Imminent Research Grant** 05/04/2022  
Project: "Incremental Parallel Inference for Machine Translation"  
Funding: Translated s.r.l. (20K€)  
Role: **Co-PI**; 12 months
- **Funds for international mobility - long periods** 09/2019 - 03/2020  
Funding: University of Verona (3.5K€); 6 months
- **MIUR Scholarship** for pursuing a PhD in Computer Science at University of Verona. 2017  
Funding: ~45k €, 3 years

---

## International Research Visits

- **University of Tübingen (DE)** 02-04/05/2022  
Research visit (~3 days); collaborator *Prof. Gerard Pons-Moll*.
- **École polytechnique (FRA)** 05/09/2019 - 13/03/2020  
Research visit (~6 months); collaborator *Prof. Maks Ovsjanikov*.
- **University College London (UK)** 23-28/06/2018  
Research visit (~1 week); collaborator *Prof. Niloy Mitra*.

---

## Invited Talks and Seminars

- ***Learning and Modeling 3D Virtual Human Interaction*** 28/05/2025  
DIBRIS, University of Genoa; hosted by *Dr. C. Mancinelli*
- ***The Geometry of Learning for Learning Geometry*** 26/05/2025  
University of Milano Bicocca; hosted by *Prof. S. Melzi*
- ***The Real Virtual Human Research*** 17/10/2024  
Carl Zeiss Foundation Symposium, Stuttgart
- ***Tailoring the Vision: How Large Models Fit 3D Humans in Clothing*** 30/09/2024  
Invited speaker at FashionAI Workshop, ECCV 2024
- ***Connecting 3D Virtual Humans: from geometry to interacting avatars*** 25/04/2024  
TUM Vision Group; hosted by *Prof. D. Cremers*
- ***Connecting the (Digital) Dots: Studying relations in 3D geometries for human virtualization*** 07/02/2024  
University of Tuebingen, College of Fellows, Humboldt Lectures
- ***Connecting the (Digital) Dots: Learning Non-Rigid Correspondence to Match 3D Humans*** 26/01/2024  
University of Tuebingen, AI Center, 10-minutes talk seminars
- ***Connecting 3D Virtual Humans: from geometry to interacting avatars*** 02/11/2023  
University of Turin; hosted by *Prof. A. Fianndrotti*
- ***Toward Relational Virtual Humans*** 29/06/2023  
Bicocca, University of Milan; hosted by *Dr. S. Melzi*
- ***Toward Relational Virtual Humans*** 27/06/2023  
University of Verona; hosted by *Prof. U. Castellani*
- ***The researcher's job*** 24/03/2023  
Istituto di Istruzione Superiore Evangelista Torricelli, Milano
- ***Merging, extending and learning representations for 3D shape matching*** 18/11/2022  
Smart Tools and Applications in Graphics (STAG), Cagliari

- *Data-driven spectral analysis for practical geometry processing* 05/05/2022  
Pi School of AI, Rome
- *Data-driven spectral analysis for practical geometry processing* 03/05/2022  
Tubingen University; hosted by Prof. G. Pons-Moll.
- *Data-driven spectral analysis for practical geometry processing* 31/03/2022  
Universitat Pompeu Fabra (UPF); hosted by Prof. C. Ballester.
- *Digital Humans: minds and bodies* 11/02/2022  
The Sapienza School for Advanced Studies; hosted by Prof. E. Rodolà.
- *When the sun goes down: a story on telling stories* 12/11/2021  
DiDo Workshop, Sapienza University of Rome
- *Functional Matching* 11/11/2021  
DiDo Workshop, Sapienza University of Rome
- *Digital Humans* 19/04/2021  
OpenDI, Sapienza University of Rome
- *Functional Maps and Non-Rigid Registration: A crash course* 29/03/2021  
Inria Strasbourg; hosted by Prof. S. Cotin.
- *Digital Humans: minds and bodies* 02/03/2021  
The Sapienza School for Advanced Studies; hosted by Prof. E. Rodolà.
- *Correspondence Learning via Linearly-invariant Embedding* 20/11/2020  
Sapienza University of Rome; hosted by Prof. E. Rodolà.
- *Functional template based matching for human bodies.* 04/03/2020  
École polytechnique; hosted by Prof. P. Memari.
- *Instant recovery of shape from spectrum via latent space connections* 25/11/2020  
International Conference on 3D Vision (3DV), 2020
- *FARM: Functional Automatic Registration Method for 3D Human Bodies.* 29/05/2019  
Eurographics (EG), 2020
- *POP: full Parametric modelling estimation for Occluded People.* 05/05/2019  
The 12th Eurographics Workshop on 3D Object Retrieval (3DOR), 2019
- *Introduction to Spectral Graph Theory: from Fourier to 3D models.* 18,19,20/12/2018  
University of Verona; hosted by Prof. G. Menegaz.

---

## Participation in Research projects

- *Fair Geometry: Toward Algorithmic Debiasing in Geometric Deep Learning.* 2021 - 2024  
Role: Researcher.  
Funding: Google Research  
Coordinator: Prof. E. Rodolà ("La Sapienza" University of Rome).
- *SPECGEO - Spectral geometric methods in practice.* 2020 - 2024  
Role: Researcher (leading the work package WP4 - Deep learning applications);  
Funding: ERC Starting Grant (Horizon2020).  
Coordinator: Prof. E. Rodolà ("La Sapienza" University of Rome).
- *Nuovi approcci di geometric deep learning ed applicazioni cross-dominio.*  
*New geometric deep learning approaches and cross-domain applications.* 01/12/2021 - 30/06/2022  
Role: PostDoc Researcher.  
Funding: ERC Starting Grant SPECGEO (41K)  
Coordinator: Prof. E. Rodolà ("La Sapienza" University of Rome).

- **Metodi di predizione strutturata tramite geometric deep learning e nuove rappresentazioni spettrali.**  
*New methods and spectral representations for structured prediction via geometric deep learning.*  
01/12/2020 - 01/12/2021  
Role: PostDoc Researcher.  
Funding: ERC Starting Grant SPECGEO (25K)  
Coordinator: Prof. E. Rodolà ("La Sapienza" University of Rome).
- **EXPROTEA - Exploring Relations in Structured Data with Functional Maps.** 2019 - 2022  
Role: Researcher (External Collaborator);  
Funding: ERC Starting Grant (Horizon2020).  
Coordinator: Prof. M. Ovsjanikov (École Polytechnique).

## Supervising and mentoring activities

- **Graduate Master Students (official co-advisor)**
  - Mattia Masiero, 2025, (Tuebingen, Thesis)
  - Francesco Palandra, 2024, (Rome, Thesis)
  - Andrea Sanchietti, 2024, (Rome, Thesis)
  - Nikita Larichev, 2022, (Siegen, Thesis)
  - Luis Mautone, 2022, (Rome, Thesis)
  - Valentino Maiorca, 2021 (Rome, Thesis)
  - Silvio Severino, 2021 (Rome, Thesis)
  - Marco Pegoraro, 2021 (Verona, Thesis) - **Awarded Best Thesis at the Italian Chapter of Eurographics**
  - Filippo Bardon, 2019 (Verona, Thesis)
- **Research Assistants and Projects**
  - Daniel Atashak, 2025, (Munich)
  - Yun Kuan Su, 2023, (Tuebingen)
  - Mattia Masiero, 2024, (Tuebingen)
  - Enes Duran, 2023, (Tuebingen)
- **PhD Mentoring (resulted in co-authored publications)**
  - University of Verona (1 student)
  - Sapienza University of Rome (~ 12 students)
  - University of Tuebingen (~ 7 students)
  - Technical University of Munich (~ 10 students)

## Participation in industrial innovation

- **Automatic extraction of anthropometric measurements from digital 3D scan of human bodies, (phase 1).**  
Role: Researcher. Supported by: Igoodi S.r.l. 27/11/2018 - 15/02/2019
- **Automatic extraction of anthropometric measurements from digital 3D scan of human bodies, (phase 2).**  
Role: Researcher. Supported by: Igoodi S.r.l. 01/08/2019 - 31/01/2020

## Other

- **CD: 50/50, No-profit association for promoting gender equality and diversity in STEM**  
Role: Co-founder and lecturer.  
[Website](#) 09/2021 - present



## Media Coverage

- *Translated's Research Center blog post on our research on parallel decoding for speeding up translation and language models.*

[Website](#)

2024

- *The College of Fellows of the University of Tuebingen covers my research as part of the "Fellow in Focus" interviews.*

[Website](#)

2024

- *Italian ministry of digital innovation lists CD:50/50 among associations addressing the digital divide in the Italian population*

[Website](#)

2021

- *The magazine of University of Verona reports Marco Pegoraro's Best Italian Master Thesis in Computer Graphics Award for our work on inverse spectral geometry*

[Website](#)

2021

## List of Publications

Bibliometric indices (Scopus - Scholar)

h-index: 13 - 16

Number of citations: 439 - 834

---

### Journals

1. Yuxuan Xue, Xianghui Xie, **Riccardo Marin**, Gerard Pons-Moll. *Gen-3Diffusion: Realistic Image-to-3D Generation Via 2D & 3D Diffusion Synergy*. IEEE Transactions on Pattern Analysis and Machine Intelligence (TPAMI), 2025.
2. Filippo Maggioli, **Riccardo Marin**, Simone Melzi, Emanuele Rodolà. *MoMaS: Mold Manifold Simulation for real-time procedural texturing*. Computer Graphics Forum (CGF), presented at Pacific Graphic (PG), 2022.
3. Marco Pegoraro, Simone Melzi, Umberto Castellani, Emanuele Rodolà, **Riccardo Marin**. *Localized Shape Modelling with Global Coherence: An Inverse Spectral Approach*. Computer Graphics Forum (CGF), presented at Symposium on Geometry Processing (SGP), 2022.
4. Pietro Musoni, **Riccardo Marin**, Simone Melzi, *A Functional Skeleton Transfer*. ACM in Computer Graphics and Interactive Techniques (PACMCGIT), 2021, presented at the Symposium of Computer Animation (SCA2021).
5. **Riccardo Marin**, Arianna Rampini, Umberto Castellani, Emanuele Rodolà, Maks Ovsjanikov, Simone Melzi. *Spectral Shape Recovery and Analysis Via Data-driven Connections*, International Journal of Computer Vision (IJCV), 2021
6. Letizia Squarcina, Guido Nosari, **Riccardo Marin**, Umberto Castellani, Marcella Bellani, Carolina Bonivento, Franco Fabbro, Massimo Molteni, Paolo Brambilla. *Automatic classification of autism spectrum disorder in children using cortical thickness and support vector machine*. Brain and Behavior, 2021
7. Eleonora Tagliabue, Diego Dall'Alba, Micha Pfeiffer, Marco Piccinelli, **Riccardo Marin**, Umberto Castellani, Stefanie Speidel, Paolo Fiorini. *Data-driven Intra-operative Estimation of Anatomical Attachments for Autonomous Tissue Dissection*. IEEE Robotics and Automation Letters (RA-L), 2021
8. Roberto M. Dyke, Yu-Kun Lai, Paul L. Rosin, Stefano Zappalà, Seana Dykes, Daoliang Guo, Kun Li, **Riccardo Marin**, Simone Melzi, Jingyu Yang. *SHREC'20: Shape correspondence with non-isometric deformations*. Computer & Graphics, 2020.
9. Simone Melzi, **Riccardo Marin**, Pietro Musoni, Filippo Bardon, Marco Tarini, Umberto Castellani. *Intrinsic/extrinsic embedding representation for functional remeshing of 3D shapes*. Computer & Graphics, 2020.
10. **Riccardo Marin**, Simone Melzi, Emanuele Rodolà, Umberto Castellani. *FARM: Functional Automatic Registration Method for 3D Human Bodies*. Computer Graphics Forum (CGF), 2019. Presented at Eurographics (EG), 2020. [Top Cited Article in CGF 2020-2021 Award]

### Conference Proceedings

1. Regine Hartwig, Dominik Muhle, **Riccardo Marin**, Daniel Cremers. *GECO: Geometrically consistent embedding with lightspeed inference*. International Conference on Computer Vision (ICCV), 2025.
2. Ilya A. Petrov, **Riccardo Marin**, Julian Chibane, Gerard Pons-Moll. *TriDi: Trilateral Diffusion of 3D Humans, Objects and Interactions*. International Conference on Computer Vision (ICCV), 2025.
3. Cecilia Curreli, Dominik Muhle, Abhishek Saroha, Zhenzhang Ye, **Riccardo Marin**, Daniel Cremers. *Non-isotropic Gaussian Diffusion for Realistic 3D Human Motion Prediction*. IEEE/CVF Conference on Computer Vision and Pattern Recognition (CVPR), 2025.
4. Lu Sang, Zehranaz Canfes, Dongliang Cao, **Riccardo Marin**, Florian Bernard, Daniel Cremers. *4Deform: Neural Surface Deformation for Robust Shape Interpolation*. IEEE/CVF Conference on Computer Vision and Pattern Recognition (CVPR), 2025.
5. Yuxuan Xue, Xianghui Xie, **Riccardo Marin**, Gerard Pons-Moll. *Human 3Diffusion: Realistic Avatar Creation via Explicit 3D Consistent Diffusion Models*. The Thirty-eighth Annual Conference on Neural Information Processing Systems (NeurIPS), 2024.
6. **Riccardo Marin**, Enric Corona, Gerard Pons-Moll. *NICP: Neural ICP for 3D Human Registration at Scale*. European Conference on Computer Vision (ECCV), 2024.

7. Dimitrije Antic, Garvita Tiwari, Batuhan Ozcomlekci, **Riccardo Marin**, Gerard Pons-Moll. *CloSe: A 3D Clothing Segmentation Dataset and Model*. International Conference on 3D Vision (3DV), 2024.
8. Vladimir Guзов, Julian Chibane, **Riccardo Marin**, Yannan He, Torsten Sattler, Gerard Pons-Moll. *Interaction Replica: Tracking human-object interaction and scene changes from human motion*. International Conference on 3D Vision (3DV), 2024.
9. Yuxuan Xue, Bharat Bhatnagar **Riccardo Marin**, Nikolaos Sarafianos, Yuanlu Xu, Tony Tung, Gerard Pons-Moll. *NSF: Neural Surface Fields for Human Modeling from Monocular Depth*. International Conference on Computer Vision (ICCV), 2023.
10. Ilya A. Petrov, **Riccardo Marin**, Julian Chibane, Gerard Pons-Moll. *Object pop-up: Can we infer 3D objects and their poses from human interactions alone?*. IEEE/CVF Conference on Computer Vision and Pattern Recognition (CVPR), 2023.
11. Andrea Santilli, Silvio Severino, Emiliano Postolache, Valentino Maiorca, Michele Mancusi, **Riccardo Marin**, Emanuele Rodolà. *Accelerating Transformer Inference for Translation via Parallel Decoding*. 61st Annual Meeting of the Association for Computational Linguistics (ACL), 2023.
12. Donato Crisostomi, Simone Antonelli, Valentino Maiorca, Luca Moschella, **Riccardo Marin**, Emanuele Rodolà. *Metric Based Few-Shot Graph Classification*. Learning on Graphs Conference (LoG), 2022.
13. Ramana Subramanyam Sundararaman, **Riccardo Marin**, Emanuele Rodolà, Maks Ovsjanikov. *Reduced Representation of Deformation Fields for Effective Non-rigid Shape Matching*. Conference on Neural Information Processing Systems (NeurIPS), 2022.
14. Giovanni Trappolini, Luca Cosmo, Luca Moschella, **Riccardo Marin**, Simone Melzi, Emanuele Rodolà. *Shape registration in the time of transformers*. Conference on Neural Information Processing Systems (NeurIPS), 2021.
15. Eleonora Tagliabue, Marco Piccinelli, Diego Dall'Alba, Juan Verde, Micha Pfeiffer, **Riccardo Marin**, Stefanie Speidel, Paolo Fiorini, Stéphane Cotin. *Intra-operative Update of Boundary Conditions for Patient-specific Surgical Simulation*, MICCAI, 2021
16. **Riccardo Marin**, Marie-Julie Rakotosaona, Simone Melzi, Maks Ovsjanikov. *Correspondence Learning via Linearly-invariant Embedding*. Conference on Neural Information Processing Systems (NeurIPS), 2020.
17. **Riccardo Marin**, Arianna Rampini, Umberto Castellani, Emanuele Rodolà, Maks Ovsjanikov, Simone Melzi. *Instant recovery of shape from spectrum via latent space connections*. International Conference on 3D Vision (3DV), 2020. **[Best Student Paper Award]**
18. **Riccardo Marin**, Simone Melzi, Emanuele Rodolà, Umberto Castellani. *High-Resolution Augmentation for Automatic Template-Based Matching of Human Models*. International Conference on 3D Vision (3DV), 2019.

## Workshops and Short papers

1. Marco Pegoraro, **Riccardo Marin**, Arianna Rampini, Simone Melzi, Luca Cosmo, Emanuele Rodolà. *Spectral Maps for Learning on Subgraphs*. NeurIPS 2023 Workshop on Symmetry and Geometry in Neural Representations, 2023. **[Best Paper Award in Topology and Graphs]**
2. Roberto M. Dyke, Feng Zhou, Yu-Kun. Lai, Paul L. Rosin, Daoliang Guo, Kun Li, **Riccardo Marin**, Jingyu Yang. *SHREC'20: Non-rigid Shape Correspondence of Physically-Based Deformations*. 13th Workshop on 3D Object Retrieval (3DOR), 2020.
3. **Riccardo Marin**, Simone Melzi, Niloy Mitra, Umberto Castellani. *POP: full Parametric modelling estimation for Occluded People*. The 12th Eurographics Workshop on 3D Object Retrieval (3DOR), 2019.
4. **Riccardo Marin**, Simone Melzi, Pietro Musoni, Filippo Bardon, Marco Tarini, Umberto Castellani. *CMH: Coordinates Manifold Harmonics for Functional Remeshing*. The 12th Eurographics Workshop on 3D Object Retrieval (3DOR), 2019.
5. Simone Melzi, **Riccardo Marin**, Pietro Musoni, Umberto Castellani, Marco Tarini. *Visual Assessments of Functional Maps*. Poster at Symposium on Geometry Processing (SGP), 2019.
6. Simone Melzi, **Riccardo Marin**, Emanuele Rodolà, Umberto Castellani, Jing Ren, Adrien Poulenard, Peter Wonka, Maks Ovsjanikov. *SHREC'19: Matching Humans with Different Connectivity*, the 12th Eurographics Workshop on 3D Object Retrieval (3DOR), 2019.