Riccardo Marin, Ph.D.

Contact:

- riccardo.marin@mnf.uni-tuebingen.de
- https://riccardomarin.github.io/
- Maria-von-Linden-Strasse 6, Tübingen, 72072
- 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 - updated: July 19, 2024

Research Interests

• 3D Geometry Processing, Shape Matching, Virtual Reality, Virtual Humans, Geometric Deep Learning, Spectral shape Analysis, AI, Computer Graphics and Computer Vision.

Research Profile

I am a Post Doctoral researcher, awarded with a Humboldt and a Marie Skłodowska-Curie Post-Doctoral Fellowships, at the University of Tübingen in the Real-Virtual Humans group led by Gerard Pons-Moll. Previously, I was a post-doc at Sapienza University of Rome in the GLADIA group led by Emanuele Rodolà, leading a work package for the SPECGEO ERC project. I followed the University of Verona's Ph.D program in Computer Science, under the supervision of Umberto Castellani, collecting a Best PhD Thesis award by EG-Italy. I graduated in Computer Science and Engineering at the University of Verona (2017). 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 conference organizer (RCD Committee at SIGGRAPH, Volunteer Chair at 3DV18 and STAG21), as Associate Editor for AI Communications Journal, 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 Junior Fellow of Eurographics and of the European Lab for Learning and Intelligent Systems (ELLIS), and I got Italian professorships habilitation (ASN) for Computer Science (01/B1) and Information Engineering (09/H1).

Academic Appointments

| University of Tübingen, Germany - Computer Science department European (Post doctoral) researcher, MSCA-PF Fellowship (12 months); Advisor: Prof. Gerard Pons-Moll | 08/2023 – 07/2024 |
|---|-------------------|
| University of Tübingen, Germany - Computer Science department Post Doctoral researcher, Humboldt Foundation Fellowship (12 months); Advisor: Prof. Gerard Pons-Moll | 07/2022 – 06/2023 |
| Sapienza University of Rome, Italy - Computer Science department Post Doctoral researcher; Advisor: Prof. Emanuele Rodolà | 12/2020 – 06/2022 |
| Sapienza University of Rome, Italy - Computer Science department Contract/Adjunct Professor Algorithm Design Course (Exerciser and member of the Exam Committee) | 04/2021 – 04/2023 |
| École Polytechnique (FRA), France - Computer Science department Visiting Student; Advisor: Prof. Maks Ovsjanikov | 09/2019 – 03/2020 |

Fellowships and Memberships

Member

| ELLIS - European Lab for Learning and Intelligent Systems Member | 15/05/2023 – present |
|---|----------------------|
| • Marie Skłodowska-Curie Action HORIZON 2021-2027 Postdoctoral Research Fellow | 2023 – present |
| Marie Curie Alumni | 2023 – present |

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Education

• University of Verona, Italy – Computer Science department

1/10/2017 – 10/06/2021

Ph.D in Computer Science with the additional label of Doctor Europeaus.

(with MIUR scolarship; concluded without extention requests)

Thesis: Merging, extending and learning representations for 3D shape matching.

Advisor: Umberto Castellani

Examiners: Alex Bronstein (Technion), Tobias Schreck (Graz University), Stefanie Wuhrer (INRIA Grenoble)

Reviewers: Alex Bronstein (Technion), Stefanie Wuhrer (INRIA Grenoble)

Awarded Best PhD Thesis in Computer Graphics by Italian Chapter of Eurographics (EG-Italy)

• Polytechnic University of Milan, Italy – Computer Science department Attendence at Graduate School on Machine Learning for Non-Matrix Data 07/2020

• University of Milan, Italy – Computer Science department

05/2019

Attendence at Graduate School at Symposium on Geometry Processing 2019 (SGP).

• University of Brescia, Italy – Computer Science department Attendence at International School on Graphics and Geometry Processing for Digital Manufacturing (EGIT)

10/2018

• Standford University, coursera.org Deep Learning Specialization; held by Prof. Andrew Ng

at Italian Chapter of Eurographics (STAG).

Certificate

08/2017 - 07/2018

• Alberta University, coursera.org

01/2021 - 04/2021

Reinforcement Learning Specialization; held by Prof. Marta White and Prof. Adam White 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).

12/2021 Volunteers Chair

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.

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• 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.

• Area Chair, Meta-Reviewer

- TinyPapers (ICLR Track); 2023

• Reviewer (Conferences)

- BMVC; 2018
- 3DV; 2019 2024
- GMDL; 2019
- NeurIPS; 2020 2024
- ICLR; 2021 2024
- AAAI; 2021
- CVPR; 2021 2024
- ICML; 2021 2024
- 3DOR; 2021, 2022
- MVA; 2021
- ICCV; 2021, 2023
- 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

• Reviewer (Journals)

- IEEE Transactions on Pattern Analysis and Machine Intelligence (PAMI); 2022 2024
- IEEE Transactions on Computer Visualization and Computer Graphics (TVCG), 2019 2023
- 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; 2024

Teaching

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.

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• 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

Assistant Professor; 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

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,

• Image Processing II

11/2018 - 02/2019

Tutor student, Master degree in Computer Science and Computer Engineering, University of Verona. Verona,

• 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. 01/B1

07/2024

• Italian Habilitation as Associate Professor in Information Processing Systems

07/2024

• 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 at the Italian Chapter of EuroGraphics (EG-Italy)

18/11/2022

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

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2021 · Outstanding Reviewer Award at the International Conference on 3D Vision (3DV 2021) 2021 Outstanding Reviewer Award 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) 07/05/2018 • Best Poster in Computer Science 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. Funding: ~45k €, 3 years

2017

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

• Connecting 3D Virtual Humans: from geometry to interacting avatars TUM Vision Group; hosted by Prof. D. Cremers

25/04/2024

• *Connecting the (Digital) Dots: Studying relations in 3D geometries for human virtualization* 07/02/2024 University of Tuebingen, College of Fellows, Humboldt Lectures

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| • Connecting the (Digital) Dots: Learning Non-Rigid Correspondence to Match 3D Humans University of Tuebingen, AI Center, 10-minutes talk seminars | 26/01/2024 |
|--|---------------|
| • Connecting 3D Virtual Humans: from geometry to interacting avatars University of Turin; hosted by Prof. A. Fiandrotti | 02/11/2023 |
| • <i>Toward Relational Virtual Humans</i> Bicocca, University of Milan; hosted by <i>Dr. S. Melzi</i> | 29/06/2023 |
| • Toward Relational Virtual Humans University of Verona; hosted by Prof. U. Castellani | 27/06/2023 |
| • <i>The researcher's job</i> Istituto di Istruzione Superiore Evangelista Torricelli, Milano | 24/03/2023 |
| • Merging, extending and learning representations for 3D shape matching Smart Tools and Applications in Graphics (STAG), Cagliari | 18/11/2022 |
| • Data-driven spectral analysis for practical geometry processing Pi School of AI, Rome | 05/05/2022 |
| • <i>Data-driven spectral analysis for practical geometry processing</i> Tubingen University; hosted by <i>Prof. G. Pons-Moll.</i> | 03/05/2022 |
| • Data-driven spectral analysis for practical geometry processing Universitat Pompeu Fabra (UPF); hosted by Prof. C. Ballester. | 31/03/2022 |
| • <i>Digital Humans: minds and bodies</i> The Sapienza School for Advanced Studies; hosted by <i>Prof. E. Rodolà</i> . | 11/02/2022 |
| • When the sun goes down: a story on telling stories DiDo Workshop, Sapienza University of Rome | 12/11/2021 |
| • Functional Matching DiDo Workshop, Sapienza University of Rome | 11/11/2021 |
| • <i>Digital Humans</i> OpenDI, Sapienza University of Rome | 19/04/2021 |
| • Functional Maps and Non-Rigid Registration: A crash course Inria Strasbourg; hosted by Prof. S. Cotin. | 29/03/2021 |
| • <i>Digital Humans: minds and bodies</i> The Sapienza School for Advanced Studies; hosted by <i>Prof. E. Rodolà</i> . | 02/03/2021 |
| • Correspondence Learning via Linearly-invariant Embedding Sapienza University of Rome; hosted by Prof. E. Rodolà. | 20/11/2020 |
| • Functional template based matching for human bodies. École polytechnique; hosted by Prof. P. Memari. | 04/03/2020 |
| • <i>Instant recovery of shape from spectrum via latent space connections</i> International Conference on 3D Vision (3DV), 2020 | 25/11/2020 |
| • FARM: Functional Automatic Registration Method for 3D Human Bodies. Eurographics (EG), 2020 | 29/05/2019 |
| • <i>POP: full Parametric modelling estimation for Occluded People</i> . The 12th Eurographics Workshop on 3D Object Retrieval (3DOR), 2019 | 05/05/2019 |
| • <i>Introduction to Spectral Graph Theory: from Fourier to 3D models.</i> University of Verona; hosted by <i>Prof. G. Menegaz</i> . | 19,20/12/2018 |

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Participation in Research projects

• Fair Geometry: Toward Algorithmic Debiasing in Geometric Deep Learning.

2021 - present

Role: Researcher.

Funding: Google Research

Coordinator: Prof. E. Rodolà ("La Sapienza" University of Rome).

• SPECGEO - Spectral geometric methods in practice.

2020 - present

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 Students (official co-advisor)
 - 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 Assistant
 - Yun Kuan Su, 2023, (Tuebingen)

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

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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)
Scopus h-index: 10
Number of citations: 522

Journals

- 1. 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.
- 2. 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.
- 3. 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).
- 4. **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, 2021
- 5. 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
- 6. 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
- 7. 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.
- 8. 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.
- 9. **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. **Riccardo Marin**, Enric Corona, Gerard Pons-Moll. *NICP: Neural ICP for 3D Human Registration at Scale*. European Conference on Computer Vision (ECCV), 2024.

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- 2. 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.
- 3. Vladimir Guzov, 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.
- 4. 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.
- 5. 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.
- 6. Andrea Santilli, Silvio Severino, Emilian 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.
- 7. Donato Crisostomi, Simone Antonelli, Valentino Maiorca, Luca Moschella, **Riccardo Marin**, Emanuele Rodolà. *Metric Based Few-Shot Graph Classification*. Learning on Graphs Conference (LoG), 2022.
- 8. 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.
- 9. 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.
- 10. 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
- 11. **Riccardo Marin**, Marie-Julie Rakotosaona, Simone Melzi, Maks Ovsjanikov. *Correspondence Learning via Linearly-invariant Embedding*. Conference on Neural Information Processing Systems (NeurIPS), 2020.
- 12. **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]
- 13. **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 RodolÃă. *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.

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ArXiV

1. Yuxuan Xue, Xianghui Xie, **Riccardo Marin**, Gerard Pons-Moll. *Human 3Diffusion: Realistic Avatar Creation via Explicit 3D Consistent Diffusion Models*. 2024.

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