

# Curriculum Vitae

## Personal Information

NAME, SURNAME: Ričards Marcinkevičs  
DATE OF BIRTH: 28.12.1995  
ADDRESS: Wieslergasse 3, 8049, Zürich, Switzerland  
PHONE: +371 29803430  
EMAIL: [ricards.marcinkevics@inf.ethz.ch](mailto:ricards.marcinkevics@inf.ethz.ch)  
NATIONALITY: Latvian



## Education

- 2019- Ph.D. student, **Department of Computer Science, Institute for Machine Learning, ETH Zürich**, supervised by Prof. Dr. [Julia E. Vogt](#), co-advised by Prof. Dr. [Fanny Yang](#)
- 2017-2019 M.Sc. ETH in Statistics, with distinction, **Department of Mathematics, ETH Zürich**. Master thesis: “*Causal Inference in Time Series for Identifying Molecular Fingerprints during Sleep*”, supervised by Prof. Dr. [Joachim M. Buhmann](#), advised by [Dorđe Miladinović](#)
- 2014-2017 B.Sc. in Data Science and Knowledge Engineering, summa cum laude, **Department of Data Science and Knowledge Engineering, Maastricht University**
- 2009-2014 **Rīga Secondary School 34**, General Certificate of Secondary Education
- 2002-2009 **Rīga Secondary School 95**

## Publications & Preprints

- Manduchi, L.,<sup>†</sup> [Marcinkevičs, R.](#),<sup>†</sup> Massi, M.C., Weikert, T., Sauter, A., Gotta, V., Müller, T., Vasella, F., Neidert, M.C., Pfister, M., Stieltjes, B., Vogt, J.E. (2022) [A Deep Variational Approach to Clustering Survival Data](#). *10<sup>th</sup> International Conference on Learning Representations, ICLR 2022*.
- Roig Aparicio, P., [Marcinkevičs, R.](#), Reis Wolfertstetter, P., Wellmann, S., Knorr, C., Vogt, J.E. (2021) [Learning Medical Risk Scores for Pediatric Appendicitis](#). *Short paper at 20<sup>th</sup> IEEE International Conference on Machine Learning and Applications, ICMLA 2021*
- Nowak, N., Gaisl, T., Miladinovic, D., [Marcinkevičs, R.](#), Osswald, M., Bauer, S., Buhmann, J.M., Zenobi, R., Sinues, P., Brown, S.A., Kohler, M. (2021) [Rapid and reversible control of human metabolism by individual sleep states](#). *Cell Reports*.
- Hatteland, A.H.,<sup>†</sup> [Marcinkevičs, R.](#),<sup>†</sup> Marquis, R., Frick, T., Hubbard, I., Vogt, J.E., Brunschwiler, T., Ryvlin, P. (2021) [Exploring Relationships between Cerebral and Peripheral Biosignals with Neural Networks](#). *Best paper award at IEEE International Conference on Digital Health, ICDH 2021*.
- [Marcinkevičs, R.](#),<sup>†</sup> Reis Wolfertstetter, P.,<sup>†</sup> Wellmann, S., Knorr, C., Vogt, J.E. (2021) [Using machine learning to predict the diagnosis, management and severity of pediatric appendicitis](#). *Frontiers in Pediatrics*.
- [Marcinkevičs, R.](#) and Vogt, J.E. (2021) [Interpretable Models for Granger Causality Using Self-explaining Neural Networks](#). *9<sup>th</sup> International Conference on Learning Representations, ICLR 2021*.
- [Marcinkevičs, R.](#) and Vogt, J.E. (2020) [Interpretability and Explainability: A Machine Learning Zoo Mini-tour](#). *arXiv: 2012.01805*.
- Daunhawer, I., Sutter, T.M., [Marcinkevičs, R.](#), Vogt, J.E. (2020) [Self-supervised Disentanglement of Modality-specific and Shared Factors Improves Multimodal Generative Models](#). *42<sup>nd</sup> DAGM German Conference on Pattern Recognition, DAGM GCPR 2020*.

## Workshop Contributions

- [Marcinkevičs, R.](#), Ozkan, E., Vogt, J.E. (2022) [Debiasing Neural Networks using Differentiable Classification Parity Proxies](#). *ICLR Workshop on Socially Responsible Machine Learning*.
- Reis Wolfertstetter, P., [Marcinkevičs, R.](#), Wellmann, S., Knorr, C., Vogt, J.E. (2021) Using Machine Learning to Predict the Diagnosis, Management and Severity of Pediatric Appendicitis. **Gero Wesener prize** at Kongress für Kinder- und Jugendmedizin (KKJ).

Manduchi, L.,<sup>†</sup> **Marcinkevičs, R.**,<sup>†</sup> Vogt, J.E. (2021) [A Deep Variational Approach to Clustering Survival Data](#). *AI for Public Health Workshop at ICLR*.

**Marcinkevičs, R.** and Vogt, J.E. (2020) [Interpretable Models for Granger Causality Using Self-explaining Neural Networks](#). *NeurIPS Workshop on Interpretable Inductive Biases and Physically Structured Learning*.

**Marcinkevičs, R.**, Miladinović, Đ., Vogt, J.E., Buhmann, J.M. (2020) Nonlinear Granger Causality for Identifying Molecular Fingerprints during Sleep. *Swiss Institute of Bioinformatics (SIB) Days*.

## Talks

---

[Debiasing Neural Networks using Differentiable Classification Parity Proxies](#) (April 2022) *ICLR Workshop on Socially Responsible Machine Learning*.

Deep Variational Approaches for Weakly Supervised Clustering with Applications to Survival Data (November 2021) *Research seminar of the TU Wien Machine Learning Research Unit*.

[Machine Learning Basics for Physicians](#) (November 2021) *Barmherzige Brüder Regensburg Hospital journal club*.

[A Deep Variational Approach to Clustering Survival Data](#) (March & May 2021) *AI for Public Health Workshop at ICLR and IBM Research Zürich machine learning seminar*.

Interpretable Models for Granger Causality Using Self-explaining Neural Networks (November 2020) *ETH Zürich Doctoral Machine Learning Seminar*.

## Reviewing

---

Conferences	ICML 2022; NeurIPS 2022
Journals	iScience ( <i>Cell Press</i> ); International Journal of Computer Vision ( <i>Springer</i> )
Workshops	Workshop on Computational Biology (ICML 2022); Bridging the Gap: From Machine Learning Research to Clinical Practice (NeurIPS 2021)

## Work Experience

---

2019- | Research assistant at the Department of Computer Science, ETH ZÜRICH

2015-2017 | Intern at MEDTRONIC Bakken Research Center, Maastricht

## Teaching Experience

---

2021, 2022 | TA for Data Science for Medicine (252-0868-00L)

2020, 2021 | TA for Advanced Machine Learning (252-0535-00L)

2020 | TA for Digital Medicine II (252-0868-00L)

## Languages

---

Latvian (native), Russian (native), English (professional), German (limited working)

## Programming & Software Skills

---

Basic	C++, mySQL, GLPK, OpenMP, Open MPI, Adobe Photoshop
Intermediate	C#, L <sup>A</sup> T <sub>E</sub> X, OpenCV, TensorFlow
Advanced	python, PyTorch, Java, R, MATLAB, MS Office

## Interests and Activities

---

Recreational Mathematics, History, Literature, Philosophy, Angling, Swimming