# Jakub M. Tomczak

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**Personal**  https://jmtomczak.github.io/

**Scholar**  https://scholar.google.com/citations?user=XB99pR4AAAAJ

**Summary**  A Group Leader & Principal Scientist/Research Manager with 15+ years of experience in machine learning, deep learning, and Generative AI. Proven track of leading research projects (academic: 49 AI MSc&PhD, industrial: 7 Computer Vision, 5 LLMs, 2 Foundation Models), carrying out cutting-edge research (2 patents & 1 application, 20+ conference papers: NeurIPS, ICML, ICLR, AISTATS, UAI, CVPR, ICCV, 25+ journal papers), and securing funds (2,150,000 €). Experienced in and enjoying managing people (3y in the industry, 8y in academia). Effective team leader encouraging initiative & independence, and facilitating cross-functional collaboration. Well-recognized in the AI community (a PC of NeurIPS 2024, the author of a book on GenAI).

## WORK EXPERIENCE

**Oct 2023 - now**  **Negotiagent**, the Netherlands (**industry**, *part-time*)
*Principal Scientist & Director, Generative AI & LLMs*

- Developing LLM-based solutions for contract negotiation

- Team management (AI strategy, KPIs formulation, reporting, supervision, agile management)

- Product development (Python & PyTorch, Git, AWS) & co-development of AI demonstrations and business cases

**Feb 2023 - now**  **Eindhoven University of Technology** (TU/e), the Netherlands (**academia**)
*Group Leader & Associate Professor, Generative AI*

- Research on GenAI, DL, and ML with applications to CV, LLMs, Life Sciences, time-series

- Group leading & management (AI strategy, KPIs formulation, supervision & mentoring)

- Project development (Python & PyTorch, OpenCV, scikit-learn, Git), scientific & grant writing

- Coordinating & teaching courses ("Generative AI Models"), selecting (hiring) committees and MSC coordinator

- A close collaboration with the industry (ASML: LLMs, Foundation Models, CV, Avular: CV, VBTI: CV, MedGPT: a consortium of companies on LLMs)

**Oct 2022 - now**  **Amsterdam AI Solutions**, the Netherlands (**industry**, *part-time*))
*Founder & Director, Generative AI*

- Consultancy for products using GenAI, DL, and ML

- Applications: Computer Vision (Tooploox/eBay, ALM Services, Microtrac), Foundation Models for Drug Discovery (DeepFlare), LLMs for Quantitative Finance (xLab, SynergyAI)

- Project development (Python & PyTorch, OpenCV, scikit-learn, Git) & co-development of AI demonstrations and business cases

**Mar 2022 - now**  **NatInLab**, the Netherlands (**industry**, *part-time*))
*Principal Scientist, Generative AI for Drug Discovery*

- Developing Foundation Models for Drug Discovery

- Team management (AI strategy, KPIs formulation, reporting, supervision, agile management)

- Product development (Python & PyTorch, scikit-learn, Git) & co-development of AI demonstrations and business cases

**Nov 2019 -
Feb 2023**

**Vrije Universiteit Amsterdam** (VU Amsterdam), the Netherlands (**academia**)
*Assistant Professor, Generative AI*

- Research on GenAI, DL, and ML with applications to CV, Life Sciences, robotics
- Group co-leading & management (AI strategy, KPIs formulation, supervision & mentoring)
- Project development (Python & PyTorch, OpenCV, scikit-learn, Git, cloud computing)
- Scientific writing, grant writing
- Coordinating & teaching courses ("Deep Learning", "Computational Intelligence"), selecting (hiring) committees and MSC coordinator

**Oct 2018 -
Dec 2019**

**Qualcomm AI Research**, Amsterdam, the Netherlands (**industry**)
*Deep Learning Scientist (Staff Engineer)*

- Research on GenAI, DL and optimization with applications to CV and efficient computing
- First fully data-dependent neural video compression method
- 1 patent & 1 patent application
- Team management (AI strategy, KPIs formulation, supervision & mentoring, agile management, reporting, cross-team collaboration, high involvement in hiring processes)
- Project development (Python, PyTorch, OpenCV, Git, cloud computing, AWS), scientific writing

**Oct 2016 -
Sept 2018**

**Universiteit van Amsterdam** (UvA), the Netherlands (**academia**)
*Principal Investigator (Marie Sklodowska-Curie Individual Fellow), Generative AI*

- Research on GenAI & DL with applications to CV
- Project management (KPIs formulation, reporting) & development (Python, Tensorflow, PyTorch, version control using Git), scientific writing, grant writing

**Feb 2016 -
Jun 2016**

**INDATA SA**, Poland (**industry**, *part-time*)
*Senior Scientist, AI for Drug Discovery*

- Research on DL applied to Drug Discovery
- Project management & development (agile management, reporting, Python & Tensorflow, version control using Git, scientific writing)

**Oct 2014 -
Sept 2016**

**Wroclaw University of Technology**, Poland (**academia**)
*Assistant Professor, Machine Learning*

- Research on GenAI, ML and DL with applications to CV and Life Sciences
- Group co-leading & management (AI strategy, KPIs formulation, supervision & mentoring)
- Project development (Python & Theano, Tensorflow, scikit-learn, version control using Git)
- Scientific writing, grant writing, coordinating & teaching courses

**Oct 2012 -
Sept 2014**

**Wroclaw University of Technology**, Poland (**academia**)
*Postdoc, Machine Learning*

- Research on GenAI, ML & DL with applications to CV, Life Sciences, logistics, teleinformatics
- Project development & management (Python & Theano, Tensorflow, scikit-learn, version control using Git, agile management), and group co-leading
- Scientific writing, grant writing, coordinating & teaching courses

**Jun 2009 -
Sept 2012**

**Wroclaw University of Technology**, Poland (**academia**)
*Ph.D. student / Research Assistant, Machine Learning*

- Research on ML (incremental learning) with applications to Life Sciences, teleinformatics
- Project development & management (Matlab, Java), and group co-leading (coordination)
- Scientific writing, grant writing, teaching courses

## EDUCATION

**Mar 2013**  **Ph.D. in Computer Science (*with honors*), track: Machine Learning**
Wroclaw University of Technology, Poland

*Title:* Incremental Knowledge Extraction from Data for Non-Stationary Objects
*Supervisor:* Prof. Jerzy Swiątek

**Dec 2009**  **M.Sc. in computer science**
*Double Diploma Program*, Blekinge Institute of Technology, Sweden

*Supervisor:* Prof. Ludwik Kuzniarz

**Jul 2009**  **M.Sc. in computer science** (***the best CS MSC thesis it Poland***)
*5-year M.Sc. program with integrated B.Sc. (B.Eng.), Grade: 5.0 (US equivalent: A/A+)*
Wroclaw University of Technology, Poland

*Supervisor:* Prof. Jerzy Swiątek

## MANAGERIAL ROLES

**Dec 2023 - now**  **Program Chair**, NeurIPS 2024
Role: planning, decision-making, cross-functional cooperation

**Oct 2023 - now**  **Principal Scientist & Director**, Negotiagent (team of 5)
Role: AI strategy, team management, agile management, product development (LLMs)

**Feb 2023 - now**  **Group leader**, Generative AI group, TU/e (team of 8-10)
Role: AI strategy, team management, project supervision (GenAI, CV, LLMs, Foundation Models)

**Feb 2023 - now**  **The M.Sc. program cluster coordinator**, TU/e
Role: cross-functional and cross-departmental cooperation

**Sept 2022 - now**  **Principal Scientist**, NatInLab (team of 2-3)
Role: AI strategy, agile management, product development (Foundation Models)

**Oct 2018 - Dec 2019**  **Team management**, Qualcomm AI Research
Role: AI strategy, agile management, product development (CV, efficient computing)

**Jun 2023 - Dec 2023**  **Assessment committee**, NGF AiNed Fellowship Grants, NWO
Role: decision-making

**Jan 2019 - Feb 2023**  **Group co-leader**, Computational Intelligence Group, VU Amsterdam (team of 12-16)
Role: AI strategy, team management, project supervision (GenAI, CV, robotics)

**Jan 2019 - Feb 2023**  **The M.Sc. AI program admission & pre-master coordinator**, VU Amsterdam
Role: cross-functional and cross-departmental cooperation

**Oct 2012 - Sept 2016**  **Group co-leader**, Modeling & ML group, Wroclaw Univ. of Technology (team of 8-12)
Role: team management, project supervision (ML, CV)

## GRANTS

**2024-2028**  **Co-Principal Investigator**, TU/e-ASML, KPAI (RVO Impuls program), **1 198 778€**

**2024-2025**  **Participant**, consortium grant, REMODEL (HORIZON-MSCA-2022-SE-01), **473 800 €**

**2022-2025**  **Principal Investigator**, Qualcomm Individual Grant, **280 000 €**

**2022-2023**  **Principal Investigator**, Network Institute (VU Amsterdam), **10 000 €**

**2020-2029**  **Researcher**, Dutch Research Council (NWO: Zwaartekracht Programma), **20 000 000 €**

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|---|---|
| **2016-2018** | **Principal Investigator**, Marie Sklodowska-Curie Individual Fellowship (EU), **177 599 €** |
| **2016** | **Researcher**, NCR&D (Poland), **7 909 741 PLN** |
| **2013-2015** | **Researcher**, NCR&D (Poland & EU), **10 672 218 PLN** |
| **2009-2013** | **Researcher**, NCR&D (Poland & EU), **36 000 000 PLN** |
| **2012-2016** | **Principal Investigator**, individual grants four times, approx. **10 000 €** |

## AWARDS & MEMBERSHIPS

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|---|---|
| **2023-now** | **Eindhoven Artificial Intelligence Systems Institute (EAISI) member** |
| **2023** | Transactions of Machine Learning Research (TMLR) **Expert Reviewers recognition** |
| **2021-now** | **European Laboratory for Learning and Intelligent Systems (ELLIS) member** |
| **2019** | Highest scoring reviewer (**top 400**) at NeurIPS 2019 |
| **2018-now** | **Oral presentations**: CVPR 2020, MIDL 2020, UAI 2018 (x2), AISTATS 2018 & 2024 |
| **2013** | The Faculty award for **best Ph.D. theses**, Wroclaw University of Technology |
| **2009** | **The best M.Sc. thesis in Poland**, Polish Information Processing Society |

## SUPERVISION

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|---|---|
| **Ph.D.** | **Accomplished**:<br>• Emile van Krieken, January 15, 2024, VU Amsterdam, co-promotor<br>• Maximilian Ilse, October 14, 2022, UvA, co-promotor<br>• Gongjin Lan, December 16, 2020, VU Amsterdam, co-promotor<br>• Szymon Zareba, December 13, 2016, Wroclaw Univ. of Technology, co-promotor<br>**Ongoing**:<br>• David Romero, defense planned for: September 10, 2024, VU Amsterdam, co-promotor<br>• Jie Luo, defense planned for: September 10, 2024, VU Amsterdam, co-promotor<br>• Anna Kuzina, defense planned for: April 2025, VU Amsterdam, co-promotor<br>• Sharvaree Vandgama, defense planned for: summer 2025, UvA, co-promotor<br>• Jan Engelmann, defense planned for: fall 2027, Helmholtz Münich, co-promotor<br>• Haotian Chen, defense planned for: fall 2028, TU/e, promotor<br>• Mahdi Mehmanchi, defense planned for: spring 2029, TU/e, promotor |
| **M.Sc.** | **ongoing:** 6, Eindhoven University of Technology<br>**Accomplished:** 1, Eindhoven University of Technology<br>**Accomplished:** 23, Vrije Universiteit Amsterdam<br>**Accomplished:** 5, Universiteit van Amsterdam<br>**Accomplished:** 3, Wroclaw Univ. of Technology |
| **B.Sc.** | **Accomplished:** 1, Eindhoven University of Technology<br>**Accomplished:** 10, Wroclaw Univ. of Technology |

## TEACHING

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|---|---|
| **M.Sc.** | **Generative AI Models**: coordinator, TU/e, 2023–2024<br>**Deep Learning**: coordinator, VU Amsterdam, 2020–2022<br>**Learning Machines**: lecturer, VU Amsterdam, 2020<br>**Deep Learning**: invited lecturer, UvA, 2018-2019<br>**Multimedia Systems**: invited lecturer, UvA, 2018<br>**Decision Support Systems**: teacher, Wroclaw Univ. of Technology, 2012-2016<br>**Artificial Intelligence**: teacher, Wroclaw Univ. of Technology, 2010-2012 |

**B.Sc.**      **Computational Intelligence**: coordinator, VU Amsterdam, 2020–2022
**Systems Analysis & Decision Making**: co-coordinator, Wroclaw Univ. of Technology, 2010-2016
**Information Systems in Management**: teacher, Wroclaw Univ. of Technology, 2010
**Operation Systems**: teacher, Wroclaw Univ. of Technology, 2010

## TEACHING QUALIFICATIONS

**2021**      **Basiskwalificatie Onderwijs (BKO)**: the Netherlands

**2015**      **Didactic Course for Academic Staff**: Poland

## SELECTED SCIENTIFIC SERVICES

- **Conferences**

**Program Chair**      **NeurIPS**: 2024

**Area Chair**      **NeurIPS**: 2021, 2022, 2023, **ICML**: 2023, **UAI**: 2023, **AISTATS**: 2022, 2023

**Reviewer**      **NeurIPS**: 2018, 2019, 2020, **ICML**: 2019, 2020, 2021, 2022, **ICLR**: 2019, 2020, 2021, 2022, **AISTATS**: 2019, 2020, 2021, **UAI**: 2021, 2022, **MIDL**: 2018, **workshops** (ICML, NeurIPS, CVPR)

**Secretary**      **Int. Conf. on Systems Science 2013**: Wroclaw, Poland,
**National Automation Conference 2014**: Wroclaw, Poland
**Int. Conf. on Systems Science 2016**: Wroclaw, Poland

- **Journals**

**Editor**      Transactions of Machine Learning Research (Action Editor)

**Reviewer**      Nature Communications, IEEE Trans. on Pattern Analysis and Machine Intelligence, Journal of Machine Learning Research, Transactions of Machine Learning Research, Bioinformatics, Medical Image Analysis, Expert Systems with Applications, IEEE Transactions on Neural Systems & Rehabilitation Engineering, Knowledge-Based Systems, IEEE J. of Biomedical and Health Informatics, European Journal of Operation Research, Neural Processing Letters, BMC Bioinformatics

- **Other**

**Examiner**      Ph.D. examiner: **14** times ($2\times$ TU Eindhoven, TU Delft, $4\times$ Univ. Amsterdam, Univ. Geneva, Univ. Liege, Surrey Univ., $2\times$ Oxford Univ., Univ. Madrid, Univ. Oslo)

**Organizer**      summer school: Generative Modeling Summer School, Eindhoven, June 23-28, 2024
Generative Modeling Summer School, Copenhagen, June 26-30, 2023

**Invited talks**  **9** conferences/workshops: PHYSTAT-SBI 2024, UAI 2023 workshop, DL Extravaganza @ UvA 2023, AI&Health at VU 2022, SPP 2021, GenU 2021, INNF 2019, ML in PL 2019, PASC 2018
**8** academic events: BioSB HotTopics 2024, 4TU 2024, TII AI 2022, CMS-CERN 2022, AI4Science (UvA) 2021, CERN 2018, CWI Life Sciences 2018, TU/e DM 2017
**7** industrial events: Amsterdam AI Meetup 2024, AI in Industry 2024, AI Innovation Center 2023, Qualcomm 2022, Booking.com 2021, Vinted 2021, Tooploox 2018
**8** summer/winter schools: Generative Modeling Summer School 2023 & 2024, Indian CV & ML Summer School 2022, AI TECH 2022, beIT 2021, Nepal Winter School in AI 2021, AwesomeIT Amsterdam 2019, Croatian Data Science Summer School 2018

# PUBLICATIONS

- **Book**

1. J.M. Tomczak, "Deep Generative Modeling", Springer, Cham, 2022 (**The first comprehensive book on Generative AI**)

- **Conference articles**

1. J.P. Engelmann, A. Palma, J.M. Tomczak, F.J. Theis, F.P. Casale, *Attention-based Multi-instance Mixed Models*, AISTATS 2024 (**oral**)

2. E. van Krieken, T. Thanapalasingam, J.M. Tomczak, F. Van Harmelen, A. Ten Teije, *A-NESI: A scalable approximate method for probabilistic neurosymbolic inference*, NeurIPS 2023

3. K. Deja, T. Trzcinski, J.M. Tomczak, *Learning Data Representations with Joint Diffusion Models*, ECML 2023

4. D, Knigge, D. Romero, A. Gu, E. Gavves, E. Bekkers, J.M. Tomczak, M. Hoogendoorn, J.-J. Sonke, *Modelling Long Range Dependencies in N-D: From Task-Specific to a General Purpose CNN*, ICLR 2023

5. A. Kuzina, M. Welling, J.M. Tomczak, *On Alleviating Adversarial Attacks on Variational Autoencoders with MCMC*, NeurIPS 2022

6. K. Deja, A. Kuzina, T. Trzcinski, J.M. Tomczak, *On Analyzing Generative and Denoising Capabilities of Diffusion-based Deep Generative Models*, NeurIPS 2022

7. D.W. Romero, R.-J. Bruintjes, J.M. Tomczak, E.J. Bekkers, M. Hoogendoorn, J. van Gemert, *Flexconv: Continuous kernel convolutions with differentiable kernel sizes*, ICLR 2022

8. D.W. Romero, A. Kuzina, E.J. Bekkers, J.M. Tomczak, M. Hoogendoorn, *CKCONV: Continuous kernel convolution for sequential data*, ICLR 2022

9. E. Krieken, J.M. Tomczak, A. ten Teije, *Storchastic: A Framework for General Stochastic Automatic Differentiation*, NeurIPS 2021

10. Y. Perugachi-Diaz, J.M. Tomczak, S. Bhulai, *Invertible DenseNets with concatenated Lipswish*, NeurIPS 2021

11. M. Ilse, J.M. Tomczak, P. Forré, *Selecting data augmentation for simulating interventions*, ICML 2021

12. D.W. Romero, E.J. Bekkers, J.M. Tomczak, M. Hoogendoorn, *Attentive group equivariant convolutional networks*, ICML 2020

13. E. Hoogeboom, V. Garcia Satorras, J.M. Tomczak, M. Welling, *The convolution exponential and generalized Sylvester flows*, NeurIPS 2020

14. J.M. Tomczak, E. Weglarz-Tomczak, A.E. Eiben, *Differential evolution with reversible linear transformations*, GECCO 2020

15. M. Ilse, J.M. Tomczak, C. Louizos, M. Welling, *DIVA: Domain invariant variational autoencoders*, MIDL 2020 (**oral**)

16. D. Abati, J.M. Tomczak, T. Blankevoort, S. Calderara, R. Cucchiara, B. Ehteshami Bejnordi, *Conditional Channel Gated Networks for Task-Aware Continual Learning*, CVPR 2020 (**oral**)

17. I. Gatopoulos, R. Lepert, A. Wiggers, G. Mariani, J.M. Tomczak, *Evolutionary Algorithm with Non-parametric Surrogate Model for Tensor Program Optimization*, IEEE CEC 2020

18. CY. Oh, J.M. Tomczak, E. Gavves, M. Welling, *Combinatorial Bayesian Optimization using the Graph Cartesian Product*, NeurIPS 2019

19. A. Habibian, T. van Rozendaal, J.M. Tomczak, T.S. Cohen, *Video compression with rate-distortion autoencoders*, ICCV 2019

20. T. Davidson, L. Falorsi, N. de Cao, T. Kipf, J.M. Tomczak, *Hyperspherical Variational Auto-Encoders*, UAI 2018 (**oral**)

21. R. van den Berg, L. Hasenclever, J.M. Tomczak, M. Welling, Sylvester Normalizing Flow for Variational Inference, UAI 2018 (**oral**)

22. M. Ilse*, J.M. Tomczak*, M. Welling, *Attention-based Deep Multiple Instance Learning*, ICML 2018

23. J.M. Tomczak, M. Welling, *VAE with a VampPrior*, AISTATS 2018 (**oral**)

24. J.M. Tomczak, M. Welling, *Improving Variational Auto-Encoders using convex combination linear Inverse Autoregressive Flow*, Benelearn 2017 2017

25. J.M. Tomczak, M.Welling, *Improving Variational Auto-Encoders using Householder Flow*, NIPS Workshop on Bayesian Deep Learning 2016

- **Journal articles**

1. J. Luo, K. Miras, J.M. Tomczak, A.E. Eiben, *Enhancing robot evolution through Lamarckian principles*, Scientific Reports 13 (1), 2023

2. J. Luo, A. Stuurman, J.M. Tomczak, J. Ellers, A.E. Eiben, *The Effects of Learning in Morphologically Evolving Robot Systems*, Frontiers in Robotics and AI, 2022

3. F. Lavitt, D.J. Rijlaarsdam, D. vd Linden, E. Weglarz-Tomczak, J.M.Tomczak, *Deep learning and transfer learning for automatic cell counting in microscope images of human cancer cell lines*, Applied Sciences, 2021

4. G. Lan, J.M. Tomczak, D.M. Roijers, A.E. Eiben., *Time efficiency in optimization with a Bayesian-evolutionary algorithm*, Swarm and Evolutionary Computation, 2022

5. G. Lan, M. van Hooft, M. De Carlo, J.M.Tomczak, A.E. Eiben, *Learning locomotion skills in evolvable robots*, Neurocomputing, 2021

6. Y. Perugachi-Diaz, J.M. Tomczak, S. Bhulai, *Deep learning for white cabbage seedling prediction*, Computers and Electronics in Agriculture, 2021

7. E. Weglarz-Tomczak, J.M. Tomczak, M. Talma, M. Burda-Grabowska, M. Giurg, S. Brul, *Identification of ebselen and its analogues as potent covalent inhibitors of papain-like protease from SARS-CoV-2*, Scientific Reports, 2021

8. I.A. Auzina, J.M. Tomczak, *Approximate Bayesian computation for discrete spaces*, Entropy, 2021

9. I. Gatopoulos, J.M. Tomczak, *Self-supervised variational auto-encoders*, Entropy, 2021

10. E. Weglarz-Tomczak, J.M. Tomczak, S. Brul, *M2R: a Python add-on to cobrapy for modifying human genome-scale metabolic reconstruction using the gut microbiota models*, Bioinformatics, 2021

11. E. Weglarz-Tomczak, D.J. Rijlaarsdam, J.M. Tomczak, S. Brul, *GEM-based metabolic profiling for Human Bone Osteosarcoma under different glucose and glutamine availability*, International Journal of Molecular Sciences, 2021

12. E. Weglarz-Tomczak, J.M. Tomczak, A.E. Eiben, S. Brul, *Population-Based Parameter Identification for Dynamical Models of Biological Networks with an Application to Saccharomyces cerevisiae*, Processes, 2021

13. J.M. Tomczak, E. Weglarz-Tomczak, *Estimating kinetic constants in the MichaelisMenten model from one enzymatic assay using Approximate Bayesian Computation*, FEBS Letters, 2019

14. J.M. Tomczak, S. Zareba, S. Ravanbakhsh, R. Greiner, *Low-Dimensional Perturb-and-MAP Approach for Learning Restricted Boltzmann Machines*, Neural Processing Letters, 2017

15. M. Drewniak, E. Weglarz-Tomczak, K. Ozga, E. Rudzinska-Szostak, K. Macegoniuk, J.M. Tomczak, M. Bejger, W. Rypniewski, L. Berlicki, *Helix-loop-helix peptide foldamers and their use in the construction of hydrolase mimetics*, Bioorganic Chemistry, 2018

16. A. Gonczarek, J.M. Tomczak, S. Zareba, J. Kaczmar, P. Dabrowski, M. Walczak, *Interaction prediction in structure-based virtual screening using deep learning*, Computers in Biology and Medicine, 2017

17. M. Zieba, S. Tomczak, J.M. Tomczak, *Ensemble Boosted Trees with Synthetic Features Generation in Application to Bankruptcy Prediction*, Expert Systems with Applications, Vol. 58, pp. 593–101, 2016

18. J.M. Tomczak, *On some properties of the low-dimensional Gumbel perturbations in the Perturb-and-MAP model*, Statistics and Probability Letters, 2016

19. J.M. Tomczak, A. Gonczarek, *Learning invariant features using Subspace Restricted Boltzmann Machine*, Neural Processing Letters, 2016

20. A. Gonczarek, J.M. Tomczak, *Articulated tracking with manifold regularized particle filter*, Machine Vision and Applications, 2016

21. J.M. Tomczak, *Learning Informative Features from Restricted Boltzmann Machines*, Neural Processing Letters, 2016

22. J.M. Tomczak, M. Zieba, *Probabilistic combination of classification rules and its application to medical diagnosis*, Machine Learning, 2015

23. J.M. Tomczak, M. Zieba, *Classification Restricted Boltzmann Machine for comprehensible credit scoring model*, Expert Systems with Applications, 2015

24. M. Zieba, J.M. Tomczak, *Boosted SVM with active learning strategy for imbalanced data*, Soft Computing, 2014

25. M. Zieba, J.M. Tomczak, J. Swiatek, M. Lubicz, *Boosted SVM for extracting rules from imbalanced data in application to prediction of the post-operative life expectancy in the lung cancer patients*, Applied Soft Computing, 2014

26. J.M. Tomczak, A. Gonczarek, *Decision rules extraction from data stream in the presence of changing context for diabetes treatment*, Knowledge and Information Systems, 2013

## PATENTS & PATENT APPLICATIONS

1. Emiel Hoogeboom, Jakub M. Tomczak, Max Welling, Dan Zhang, Device for and computer-implemented method of digital signal processing, US Patent US11823302B2

2. Changyong Oh, Efstratios Gavves, Jakub M. Tomczak, Max Welling, Combinatorial bayesian optimization using a graph cartesian product, US Patent US11842279B2

3. Davide Abati, Babak Ehteshami Bejnordi, Jakub M. Tomczak, Tijmen P.F. Blankevoort, Conditional Computation For Continual Learning, US Patent App. 17/097,811

## REFEREES

| | |
|---|---|
| **Name** | Max Welling |
| **Company** | Universiteit van Amsterdam |
| **Position** | Full Professor |
| **Contact** | welling.max@gmail.com |

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|---|---|
| **Name** | Taco Cohen |
| **Company** | Meta |
| **Position** | AI Research Scientist |
| **Contact** | taco.cohen@gmail.com |

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|---|---|
| **Name** | Amirhossein Habibian |
| **Company** | Qualcomm AI Research |
| **Position** | Director of Engineering |
| **Contact** | habibian.a.h@gmail.com |