



### **Personal information**

First name, Surname:	Michael Alexander Riegler		
Date of birth:	18.09.1984	Sex:	M
Nationality:	Austrian		
Researcher unique identifier(s) (ORCID, ResearcherID, etc.):	https://scholar.google.com/citations?user=Vd_ApDoAAAAJ&hl=en		
URL for personal website:	https://www.simula.no/people/michael		
Languages	German (native), English (full professional), Norwegian (full professional)		

#### **Education**

Year	Faculty/department - University/institution - Country
2017 (dissertation defended)	Dr. Scient (Ph.D.), Department of Informatics, University of Oslo, NO (submitted 12 months ahead of schedule)
2014	Magister (Mag.), Department of Informatics and Department of Economics, University of Klagenfurt, AT

## Positions - current and previous

Year	Job title – Employer - Country
2024-	Head of AI strategy, SimulaMet - Simula Metropolitan Center for Digital Engineering, NO
2019-	Chief Research Scientist, SimulaMet - Simula Metropolitan Center for Digital Engineering, NO
2023-	Professor, OsloMet - Oslo Metropolitan University, NO
2019-	Adjunct Associate Professor, University of Tromsø, NO
2023-2024	Deputy Head of Department Holistic Systems, SimulaMet - Simula Metropolitan Center for Digital Engineering, NO
2019-2020	Adjunct Associate Professor, Kristiania University College, NO
2018-2019	Senior Research Scientist, SimulaMet- Simula Metropolitan Center for Digital Engineering, NO
2017-2018	Research Scientist, Simula Research Laboratory, NO

2014-2017	PhD Student, Simula Research Laboratory, NO

#### **Career breaks**

Year	Reason
2020	Parental leave second child (5 month)
2017	Parental leave first child (6 month)

#### **Project management experience**

Year	Project owner - Project - Role - Funder
2021-2025	ILMA - Interview training of child-welfare and law-enforcement professionals interviewing maltreated children supported via artificial avatars (WP leader, RCN Fripro, 12MNOK)
2021-2023	AlDirector - Automatic sport video editing using Al (Project leader, RCN Innovation project, 4MNOK)
2022-2023	GastroNet - Building an Imagenet like dataset for gastroenterology (Project leader, American society of gastroenterology, 70K USD)
2018-2020	AutoCap - Automatic Anomaly Detection in Video Capsule Endoscopy (WP leader, RCN BIA, 12MNOK)
2019-2024	ReproAl - Improved assisted human reproduction technology using AI (WP leader, RCN FRIMEDBIO, 12MNOK)
2017-2019	INTROMAT - INTROducing Mental health through Adaptive Technology (Researcher, RCN Lighthouse, 72MNOK)
2017-2020	PRIVATON - Protecting Shared Data with Privacy Automatons (Researcher, RCN, 12MNOK)
2014-2017	EONS - Efficient Execution of Large Workloads on Elastic Resources (Researcher, RCN FRINATEK, 12MNOK)
2018	GastroEye - GI video capsule analysis (Researcher, Italian, 700KNOK)
2016	DigSys - Non-Invasive, Scalable Automatic Screening of the GI System (Researcher, RCN pre-project, 500KNOK)

## **Supervision of students**

- np		
Master's	Ph.D.	University/institution - Country
students	students	
65	14	University of Oslo, Norway
		OsloMet, Norway
		University of Tromsø, Norway
		University of Trento, Italy
		2 PhDs finished as main and 4 as co-supervisor

#### Other relevant professional experiences

Year	Description - Role
2023-	Guest editor Nature Scientific Reports Collection on AI alignment
2022-	Editor, Nature Scientific Reports
2023-	Expert group member on generative artificial intelligence, The Norwegian Board of Technology, NO
2017-2022	Expert group member on artificial intelligence in health, The Norwegian Board of Technology, NO
2022	Research Proposal reviewer, Irish research council, IRL
2021-	SimulaMet Employee Representative board member, SimulaMet, NO
2019-	OsloMet AI lab board member, OsloMet, NO
2019-2023	Member of the Academy of Norway, Akademiet for yngre forskere
2014-	ACM and IEEE member

# **Track record**

My research interests include machine learning, artificial intelligence (AI), and applied AI with a focus on transparent and trustworthy AI systems and metrics. My experience covers machine learning with a focus on deep learning, open data, and reproducibility, explainability, transparent systems for biomedical and social applications and multimodal data analysis. *Total number of publications (journals, peer-review conferences):* ~350, Number of citations: 10632, h-index: 47, i10-index: 153

- Drejer C, Riegler MA, Halvorsen P, Johnson MS, Baugerud GA. Livestreaming technology and online child sexual exploitation and abuse: A scoping review. Trauma, violence, & abuse. 2024 Jan;25(1):260-74.
- Maier-Hein L, Reinke A, Godau P, Tizabi MD, Buettner F, Christodoulou E, Glocker B, Isensee F, Kleesiek J, Kozubek M, Reyes M, Riegler MA, et al. Metrics reloaded: recommendations for image analysis validation. Nature methods. 2024 Feb 12:1-8.
- Røed RK, Powell MB, Riegler MA, Baugerud GA. A field assessment of child abuse investigators' engagement with a child-avatar to develop interviewing skills. Child Abuse & Neglect. 2023 Sep 1;143:106324.
- Hassan SZ, Sabet SS, Riegler MA, Baugerud GA, Ko H, Salehi P, Røed RK, Johnson M, Halvorsen P. Enhancing investigative interview training using a child avatar system: a comparative study of interactive environments. Nature Scientific Reports. 2023 Nov 21;13(1):20403.
- Nguyen T, Khadka R, Phan N, Yazidi A, Halvorsen P, Riegler MA. Combining datasets to improve model fitting. In 2023 International Joint Conference on Neural Networks (IJCNN) 2023 Jun 18 (pp. 1-9). IEEE.
- Aneja S, Midoglu C, Dang-Nguyen DT, Khan SA, Riegler M, Halvorsen P, Bregler C, Adsumilli B. Acm multimedia grand challenge on detecting cheapfakes. arXiv preprint arXiv:2207.14534. 2022 Jul 29.
- Hicks SA, Strümke I, Thambawita V, Hammou M, Riegler MA, Halvorsen P, Parasa S. On evaluation metrics for medical applications of artificial intelligence. Scientific reports. 2022 Apr 8;12(1):5979.

- Lammerse M, Hassan SZ, Sabet SS, Riegler MA, Halvorsen P. Human vs. GPT-3: The challenges of extracting emotions from child responses. In2022 14th International Conference on Quality of Multimedia Experience (QoMEX) 2022 Sep 5 (pp. 1-4). IEEE.
- Said N, Ahmad K, Riegler M, Pogorelov K, Hassan L, Ahmad N, Conci N. Natural disasters detection in social media and satellite imagery: a survey. Multimedia Tools and Applications. 2019 Nov;78:31267-302.

In addition to my scientific work, I am also active in research outreach, comparable and open science and open data (www.datasets.simula.no, https://multimediaeval.github.io/). In my career I helped organizing and hosting several scientific challenges, published several openly available datasets and contributed to the public dissemination of research trough articles in newspapers internationally (US, Germany, Austria) and in Norway, etc. I also chaired the open software and dataset tracks at MMSys, MMM in the past and I was the general chair for the International Conference on Frontiers of Artificial Intelligence, Ethics, and Multidisciplinary Applications 2023.

	Fellowships, awards
2022	Nominee for the AI influencer of the Year Award, Hyperight AB
2019	One of the five ESHRE 2019 most promising researchers (ESRHE Young Ambassador), European Society of Human Reproduction and Embryology
2018	Researcher of the Year of Simula Research Laboratory, Simula Research Laboratory
2018	IEEE ISM 2018 Best paper award
2018	MediaEval 2018 Distinctive Mention award
2018	IEEE CBMS 2018 Best paper award
2018	One of four Rising Stars/Leaders in the multimedia research community, ACM SIGMM
2017	TEWI Hall of fame – Award from University of Klagenfurt for most successful alumni
2014	Award for best performing student 2012/2013 from the Faculty of Management and Economics at the University of Klagenfurt
2014	Scholarship from Klagenfurt University for extraordinary study achievements
2013	Scholarship from Klagenfurt University for extraordinary study achievements
2013	Excellence Scholarship Industrialists' association Carinthia (Exzellenzstipendium der Industriellenvereinigung Kärnten)
2012	Scholarship from Klagenfurt University for extraordinary study achievements

#### **Patents**

ESPELAND HN, Riegler MA, inventors; Augere Medical As, assignee. Method for real-time detection of objects, structures or patterns in a video, an associated system and an associated computer readable medium. United States patent Application US 17/620,639. 2022 Sep 22.