# Curriculum vitae with track record

### **Personal information**

First name, Surname:	Riegler, Michael Alexander		
Date of birth:		Sex:	
Nationality:			
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		

### 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
2019-	Chief Research Scientist, SimulaMet - Simula Metropolitan Center for Digital Engineering, NO
2021-	Adjunct Associate Professor, University of Tromsø, NO

### **Career breaks**

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

### Project management experience

(Academic sector/research institutes/industrial sector/public sector/other. Please list the most relevant.)

Year	Project owner - Project - Role - Funder
2021-2026	<u>ILMA</u> - Interview training of child-welfare and law-enforcement professionals interviewing maltreated children supported via artificial avatars (R, RCN Fripro, 12MNOK)

2021-2023	AIDirector (PL, RCN Innovation project, automatic sport video editing using AI, 4MNOK)
2018-2020	<u>AutoCap</u> (R, RCN BIA, Automatic Anomaly Detection in Video Capsule Endoscopy, 12MNOK)
2019-2024	<u>ReproAI</u> (R, RCN FRIMEDBIO, improved assisted human reproduction technology using AI, 12MNOK)
2016	<u>DigSys</u> (R, RCN pre-project, Non-Invasive, Scalable Automatic Screening of the GI System, 500KNOK)
2014-2017	EONS (R, RCN FRINATEK, Efficient Execution of Large Workloads on Elastic Resources, 12MNOK)
2017-2020	PRIVATON (R, RCN, Protecting Shared Data with Privacy Automatons, 12MNOK)
2018	GastroEye (R, Italian, GI video capsule analysis, 700KNOK)
2018-2023	PACER (R, RCN, Patient-Centric Engineering in Rehabilitation, 12MNOK)
2017-2019	INTROMAT (R, RCN Lighthouse, INTROducing Mental health through Adaptive Technology, 72MNOK)

### Supervision of students

Master's students	Ph.D. students	University/institu	tion - Country
2017-	11	PhDs	University of Oslo, Norway, OsloMet, Norway University of Tromsø, Norway
2014-	35	Masters	University of Oslo, Norway OsloMet, Norway

## Other relevant professional experiences

Year	Description - Role
2019-	Member of the Academy of of Norway, Akademiet for yngre forskere
2017-	Expert group member on artificial intelligence in health, The Norwegian Board of Technology
2014-	ACM and IEEE member

### Track record

My research interests include machine learning, multimedia and distributed systems. In particular, my experience cover machine learning with a focus on deep learning and system performance for generating synthetic data and multimodal data analysis combining different sources of data such as text and images.

### Total number of publications (journals, peer-review conferences): ~251 Google Scholar <u>https://scholar.google.no/citations?user=Vd\_ApDoAAAAJ&hl=en</u> Number of citations: 2810, h-index: 29, i10-index: 68

### 10 selected publications:

- Riegler MA, Stensen MH, Witczak O, Andersen JM, Hicks SA, Hammer HL, Delbarre E, Halvorsen P, Yazidi A, Holst N, Haugen TB. Artificial intelligence in the fertility clinic: status, pitfalls and possibilities. Human Reproduction. 2021 Sep;36(9):2429-42.
- Baugerud GA, Johnson MS, Klingenberg Røed R, Lamb ME, Powell M, Thambawita V, Hicks SA, Salehi P, Hassan SZ, Halvorsen P, Riegler MA. Multimodal Virtual Avatars for Investigative Interviews with Children. InProceedings of the 2021 Workshop on Intelligent Cross-Data Analysis and Retrieval 2021 Aug 21 (pp. 2-8).
- Thambawita V, Hicks SA, Isaksen J, Stensen MH, Haugen TB, Kanters J, Parasa S, de Lange T, Johansen HD, Johansen D, Hammer HL. DeepSynthBody: the beginning of the end for data deficiency in medicine. In2021 International Conference on Applied Artificial Intelligence (ICAPAI) 2021 May 19 (pp. 1-8). IEEE.
- Hicks SA, Isaksen JL, Thambawita V, Ghouse J, Ahlberg G, Linneberg A, Grarup N, Strümke I, Ellervik C, Olesen MS, Hansen T. Explaining deep neural networks for knowledge discovery in electrocardiogram analysis. Scientific reports. 2021 May 26;11(1):1-1.
- Hassan SZ, Ahmad K, Hicks S, Halvorsen P, Al-Fuqaha A, Conci N, Riegler M. Visual sentiment analysis from disaster images in social media. arXiv preprint arXiv:2009.03051. 2020 Sep 4.
- Hicks SA, Andersen JM, Witczak O, Thambawita V, Halvorsen P, Hammer HL, Haugen TB, Riegler MA. Machine learning-based analysis of sperm videos and participant data for male fertility prediction. Scientific reports. 2019 Nov 14;9(1):1-0.
- Nordskog AJ, Halvorsen P, Hicks S, Stensland HK, Hammer HL, Johansen D, Riegler MA. Semantic Analysis of Soccer News for Automatic Game Event Classification. In2019 International Conference on Content-Based Multimedia Indexing (CBMI) 2019 Sep 4 (pp. 1-6). IEEE.v
- Soleymani M, Riegler M, Halvorsen P. Multimodal analysis of user behavior and browsed content under different image search intents. International journal of multimedia information retrieval. 2018 Mar;7(1):29-41.
- Michael Riegler, Konstantin Pogorelov, Sigrun L. Eskeland, Zeno Albisser, Dag Johansen, Carsten Griwodz, Peter T. Schmidt, Thomas de Lange and Pål Halvorsen, From Annotation to Computer Aided Diagnosis: Detailed Evaluation of a Medical Multimedia System, ACM Journal on TOMM, 2017
- Michael Riegler, Mathias Lux, Carsten Griwodz, Concetto Spampinato, Thomas de Lange, Sigrun L. Eskeland, Konstantin Pogorelov, Wallapak Tavanapong, Peter T. Schmidt, Cathal Gurrin, Dag Johansen, Håvard Johansen, Pål Halvorsen, Multimedia and Medicine: Teammates for Better Disease Detection and Survival, In Proceedings of ACM Multimedia, (Amsterdam, ACM, 2016)

In addition to my scientific work, I am also active in research outreach, comparable and open science and open data. 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, etc.