



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 |
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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 AI (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

| Master's students | Ph.D. students | University/institution - Country |
|-------------------|-------------------|--|
| 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 Al 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: 9727, h-index: 46, i10-index: 146

- 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.
- 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.
- 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.