

# Michael Alexander Riegler

## List of Publications by Year in descending order

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Version: 2024-02-01

134  
papers

4,403  
citations

236925

25  
h-index

197818

49  
g-index

137  
all docs

137  
docs citations

137  
times ranked

2234  
citing authors

#	ARTICLE	IF	CITATIONS
1	FANet: A Feedback Attention Network for Improved Biomedical Image Segmentation. IEEE Transactions on Neural Networks and Learning Systems, 2023, 34, 9375-9388.	11.3	67
2	Artificial Intelligence in Gastroenterology. , 2022, , 1-20.		0
3	MSRF-Net: A Multi-Scale Residual Fusion Network for Biomedical Image Segmentation. IEEE Journal of Biomedical and Health Informatics, 2022, 26, 2252-2263.	6.3	118
4	Meta-learning with implicit gradients in a few-shot setting for medical image segmentation. Computers in Biology and Medicine, 2022, 143, 105227.	7.0	21
5	Complexity and variability analyses of motor activity distinguish mood states in bipolar disorder. PLoS ONE, 2022, 17, e0262232.	2.5	9
6	Artificial Intelligence in Gastroenterology. , 2022, , 919-938.		0
7	On evaluation metrics for medical applications of artificial intelligence. Scientific Reports, 2022, 12, 5979.	3.3	141
8	SinGAN-Seg: Synthetic training data generation for medical image segmentation. PLoS ONE, 2022, 17, e0267976.	2.5	27
9	Visual Sentiment Analysis from Disaster Images in Social Media. Sensors, 2022, 22, 3628.	3.8	14
10	Synthesizing a Talking Child Avatar to Train Interviewers Working with Maltreated Children. Big Data and Cognitive Computing, 2022, 6, 62.	4.7	9
11	Åika: A Distributed Edge System for AI Inference. Big Data and Cognitive Computing, 2022, 6, 68.	4.7	3
12	Session details: Session 1: Multimodal Data Analysis. , 2022, , .		0
13	Comparative validation of multi-instance instrument segmentation in endoscopy: Results of the ROBUST-MIS 2019 challenge. Medical Image Analysis, 2021, 70, 101920.	11.6	41
14	Large scale "speedtest" experimentation in Mobile Broadband Networks. Computer Networks, 2021, 184, 107629.	5.1	7
15	Real-Time Polyp Detection, Localization and Segmentation in Colonoscopy Using Deep Learning. IEEE Access, 2021, 9, 40496-40510.	4.2	160
16	HTAD: A Home-Tasks Activities Dataset with Wrist-Accelerometer and Audio Features. Lecture Notes in Computer Science, 2021, , 196-205.	1.3	0
17	Kvasir-Instrument: Diagnostic and Therapeutic Tool Segmentation Dataset in Gastrointestinal Endoscopy. Lecture Notes in Computer Science, 2021, , 218-229.	1.3	26
18	Multi-mode Systems for Resilient Security in Industry 4.0. Procedia Computer Science, 2021, 180, 301-307.	2.0	6

#	ARTICLE	IF	CITATIONS
19	The EndoTect 2020 Challenge: Evaluation and Comparison of Classification, Segmentation and Inference Time for Endoscopy. Lecture Notes in Computer Science, 2021, , 263-274.	1.3	13
20	Artificial Intelligence in Medicine. , 2021, , 1-20.		0
21	Explaining deep neural networks for knowledge discovery in electrocardiogram analysis. Scientific Reports, 2021, 11, 10949.	3.3	26
22	Fr615 IMPACT OF IMAGE RESOLUTION ON CONVOLUTIONAL NEURAL NETWORKS PERFORMANCE IN GASTROINTESTINAL ENDOSCOPY. Gastroenterology, 2021, 160, S-377.	1.3	1
23	A comprehensive analysis of classification methods in gastrointestinal endoscopy imaging. Medical Image Analysis, 2021, 70, 102007.	11.6	19
24	Kvasir-Capsule, a video capsule endoscopy dataset. Scientific Data, 2021, 8, 142.	5.3	86
25	DeepSynthBody: the beginning of the end for data deficiency in medicine. , 2021, , .		9
26	NanoNet: Real-Time Polyp Segmentation in Video Capsule Endoscopy and Colonoscopy. , 2021, , .		27
27	ID: 3523524 DATA AUGMENTATION USING GENERATIVE ADVERSARIAL NETWORKS FOR CREATING REALISTIC ARTIFICIAL COLON POLYP IMAGES: VALIDATION STUDY BY ENDOSCOPISTS. Gastrointestinal Endoscopy, 2021, 93, AB190.	1.0	5
28	Diagnosing Schizophrenia from Activity Records using Hidden Markov Model Parameters. , 2021, , .		5
29	Using 3D Convolutional Neural Networks for Real-time Detection of Soccer Events. International Journal of Semantic Computing, 2021, 15, 161-187.	0.5	6
30	A self-learning teacher-student framework for gastrointestinal image classification. , 2021, , .		9
31	A Comprehensive Study on Colorectal Polyp Segmentation With ResUNet++, Conditional Random Field and Test-Time Augmentation. IEEE Journal of Biomedical and Health Informatics, 2021, 25, 2029-2040.	6.3	137
32	HYPERAKTIV. , 2021, , .		3
33	Exploring Deep Learning Methods for Real-Time Surgical Instrument Segmentation in Laparoscopy. , 2021, , .		6
34	Artificial intelligence in the fertility clinic: status, pitfalls and possibilities. Human Reproduction, 2021, 36, 2429-2442.	0.9	38
35	Pyramidal Segmentation of Medical Images using Adversarial Training. , 2021, , .		1
36	ICDAR'21. , 2021, , .		0

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37	Mode Switching for Secure Web Applications – A Juice Shop Case Scenario. Communications in Computer and Information Science, 2021, , 3-8.	0.5	2
38	File System Support for Privacy-Preserving Analysis and Forensics in Low-Bandwidth Edge Environments. Information (Switzerland), 2021, 12, 430.	2.9	6
39	Unraveling the Impact of Land Cover Changes on Climate Using Machine Learning and Explainable Artificial Intelligence. Big Data and Cognitive Computing, 2021, 5, 55.	4.7	4
40	Prediction of Cloud Fractional Cover Using Machine Learning. Big Data and Cognitive Computing, 2021, 5, 62.	4.7	1
41	DeepFake electrocardiograms using generative adversarial networks are the beginning of the end for privacy issues in medicine. Scientific Reports, 2021, 11, 21896.	3.3	31
42	Impact of Image Resolution on Deep Learning Performance in Endoscopy Image Classification: An Experimental Study Using a Large Dataset of Endoscopic Images. Diagnostics, 2021, 11, 2183.	2.6	38
43	Predicting High Delays in Mobile Broadband Networks. IEEE Access, 2021, 9, 168999-169013.	4.2	3
44	Automated Event Detection and Classification in Soccer: The Potential of Using Multiple Modalities. Machine Learning and Knowledge Extraction, 2021, 3, 1030-1054.	5.0	9
45	AI-Based Video Clipping of Soccer Events. Machine Learning and Knowledge Extraction, 2021, 3, 990-1008.	5.0	6
46	PAANet: Progressive Alternating Attention for Automatic Medical Image Segmentation. , 2021, , .		4
47	Flexible device compositions and dynamic resource sharing in PCIe interconnected clusters using Device Lending. Cluster Computing, 2020, 23, 1211-1234.	5.0	4
48	User-adaptive models for activity and emotion recognition using deep transfer learning and data augmentation. User Modeling and User-Adapted Interaction, 2020, 30, 365-393.	3.8	19
49	A Genetic Attack Against Machine Learning Classifiers to Steal Biometric Actigraphy Profiles from Health Related Sensor Data. Journal of Medical Systems, 2020, 44, 187.	3.6	1
50	PSYKOSE: A Motor Activity Database of Patients with Schizophrenia. , 2020, , .		14
51	Applying machine learning in motor activity time series of depressed bipolar and unipolar patients compared to healthy controls. PLoS ONE, 2020, 15, e0231995.	2.5	40
52	HyperKvasir, a comprehensive multi-class image and video dataset for gastrointestinal endoscopy. Scientific Data, 2020, 7, 283.	5.3	206
53	DoubleU-Net: A Deep Convolutional Neural Network for Medical Image Segmentation. , 2020, , .		286
54	Kvasir-SEG: A Segmented Polyp Dataset. Lecture Notes in Computer Science, 2020, , 451-462.	1.3	397

#	ARTICLE	IF	CITATIONS
55	Human Activity Recognition from Multiple Sensors Data Using Multi-fusion Representations and CNNs. ACM Transactions on Multimedia Computing, Communications and Applications, 2020, 16, 1-19.	4.3	30
56	An Extensive Study on Cross-Dataset Bias and Evaluation Metrics Interpretation for Machine Learning Applied to Gastrointestinal Tract Abnormality Classification. ACM Transactions on Computing for Healthcare, 2020, 1, 1-29.	5.0	43
57	Toadstool. , 2020, , .		4
58	PMData. , 2020, , .		25
59	Vid2Pix - A Framework for Generating High-Quality Synthetic Videos. , 2020, , .		0
60	Real-Time Detection of Events in Soccer Videos using 3D Convolutional Neural Networks. , 2020, , .		10
61	Social media and satellites. Multimedia Tools and Applications, 2019, 78, 2837-2875.	3.9	27
62	Natural disasters detection in social media and satellite imagery: a survey. Multimedia Tools and Applications, 2019, 78, 31267-31302.	3.9	76
63	Estimating Downlink Throughput from End-user Measurements in Mobile Broadband Networks. , 2019, , .		7
64	Bleeding detection in wireless capsule endoscopy videos â€” Color versus texture features. Journal of Applied Clinical Medical Physics, 2019, 20, 141-154.	1.9	32
65	Automatic Hyperparameter Optimization for Transfer Learning on Medical Image Datasets Using Bayesian Optimization. , 2019, , .		18
66	Medical Multimedia Systems and Applications. , 2019, , .		3
67	THREAT: A Large Annotated Corpus for Detection of Violent Threats. , 2019, , .		5
68	WISEM. , 2019, , .		20
69	383 DEEP LEARNING FOR AUTOMATIC GENERATION OF ENDOSCOPY REPORTS. Gastrointestinal Endoscopy, 2019, 89, AB77.	1.0	7
70	Automatic detection of passable roads after floods in remote sensed and social media data. Signal Processing: Image Communication, 2019, 74, 110-118.	3.2	38
71	[Invited papers] Comparing Approaches to Interactive Lifelog Search at the Lifelog Search Challenge (LSC2018). ITE Transactions on Media Technology and Applications, 2019, 7, 46-59.	0.5	71
72	ResUNet++: An Advanced Architecture for Medical Image Segmentation. , 2019, , .		434

#	ARTICLE	IF	CITATIONS
73	A Web-Based Software for Training and Quality Assessment in the Image Analysis Workflow for Cardiac T1 Mapping MRI. , 2019, , .		0
74	Efficient Live and On-Demand Tiled HEVC 360 VR Video Streaming. International Journal of Semantic Computing, 2019, 13, 367-391.	0.5	8
75	Machine Learning-Based Analysis of Sperm Videos and Participant Data for Male Fertility Prediction. Scientific Reports, 2019, 9, 16770.	3.3	41
76	One-Dimensional Convolutional Neural Networks on Motor Activity Measurements in Detection of Depression. , 2019, , .		18
77	Heart Rate Prediction from Head Movement during Virtual Reality Treatment for Social Anxiety. , 2019, , .		7
78	Saga: An Open Source Platform for Training Machine Learning Models and Community-driven Sharing of Techniques. , 2019, , .		0
79	ImageCLEF 2019: Multimedia Retrieval in Medicine, Lifelogging, Security and Nature. Lecture Notes in Computer Science, 2019, , 358-386.	1.3	20
80	Using Mr. MAPP for Lower Limb Phantom Pain Management. , 2019, , .		5
81	ACM Multimedia BioMedia 2019 Grand Challenge Overview. , 2019, , .		8
82	Camera Synchronization for Panoramic Videos. , 2018, , 565-592.		3
83	Multimodal analysis of user behavior and browsed content under different image search intents. International Journal of Multimedia Information Retrieval, 2018, 7, 29-41.	5.2	9
84	Deep learning and handcrafted feature based approaches for automatic detection of angiectasia. , 2018, , .		13
85	Top-down saliency detection driven by visual classification. Computer Vision and Image Understanding, 2018, 172, 67-76.	4.7	31
86	The Importance of Medical Multimedia. , 2018, , .		2
87	Tradeoffs Using Binary and Multiclass Neural Network Classification for Medical Multidisease Detection. , 2018, , .		11
88	Opensea. , 2018, , .		1
89	Methodology to develop machine learning algorithms to improve performance in gastrointestinal endoscopy. World Journal of Gastroenterology, 2018, 24, 5057-5062.	3.3	31
90	Challenges and Opportunities within Personal Life Archives. , 2018, , .		4

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91	Mental health monitoring with multimodal sensing and machine learning: A survey. Pervasive and Mobile Computing, 2018, 51, 1-26.	3.3	215
92	Comprehensible reasoning and automated reporting of medical examinations based on deep learning analysis. , 2018, , .		6
93	Mimir. , 2018, , .		15
94	Depresjon. , 2018, , .		54
95	Dissecting Deep Neural Networks for Better Medical Image Classification and Classification Understanding. , 2018, , .		19
96	Deep Learning and Hand-Crafted Feature Based Approaches for Polyp Detection in Medical Videos. , 2018, , .		35
97	Motor Activity Based Classification of Depression in Unipolar and Bipolar Patients. , 2018, , .		22
98	Overview of ImageCLEF 2018: Challenges, Datasets and Evaluation. Lecture Notes in Computer Science, 2018, , 309-334.	1.3	21
99	HINDSIGHT. , 2018, , .		4
100	Sharing and reproducibility in ACM SIGMM. ACM Multimedia, 2018, 10, 1-1.	0.1	1
101	ClusterTag. , 2017, , .		2
102	Building a Disclosed Lifelog Dataset. , 2017, , .		12
103	The JORD System. , 2017, , .		5
104	LireSolr. , 2017, , .		2
105	JORD. , 2017, , .		16
106	Detection and Classification of Bleeding Region in WCE Images using Color Feature. , 2017, , .		20
107	Multimodal Analysis of Image Search Intent. , 2017, , .		9
108	Efficient disease detection in gastrointestinal videos â€“ global features versus neural networks. Multimedia Tools and Applications, 2017, 76, 22493-22525.	3.9	52

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109	A Holistic Multimedia System for Gastrointestinal Tract Disease Detection. , 2017, , .		8
110	KVASIR. , 2017, , .		272
111	From Annotation to Computer-Aided Diagnosis. ACM Transactions on Multimedia Computing, Communications and Applications, 2017, 13, 1-26.	4.3	22
112	The same, only different: Contrasting mobile operator behavior from crowdsourced dataset. , 2017, , .		6
113	Medical Multimedia Information Systems (MMIS). , 2017, , .		8
114	Die Schlussformel „bis der Esel auf die Leiter klettert“ im Kolophon der mittelalterlichen hebräischen Handschriften in Aschkenas. Aschkenas, 2017, 108, .	0.0	0
115	Nerthus. , 2017, , .		37
116	Smart Lifelogging: Recognizing Human Activities using PHASOR. , 2017, , .		3
117	Efficient processing of videos in a multi-auditory environment using device lending of GPUs. , 2016, , .		7
118	Device lending in PCI express networks. , 2016, , .		7
119	Explorative hyperbolic-tree-based clustering tool for unsupervised knowledge discovery. , 2016, , .		7
120	EIR – Efficient computer aided diagnosis framework for gastrointestinal endoscopies. , 2016, , .		25
121	Tiling in Interactive Panoramic Video: Approaches and Evaluation. IEEE Transactions on Multimedia, 2016, 18, 1819-1831.	7.2	132
122	ChaLearn Joint Contest on Multimedia Challenges Beyond Visual Analysis: An overview. , 2016, , .		57
123	GPU-Accelerated Real-Time Gastrointestinal Diseases Detection. , 2016, , .		15
124	Crowdsourcing as self-fulfilling prophecy: Influence of discarding workers in subjective assessment tasks. , 2016, , .		8
125	Right inflight?. , 2016, , .		3
126	Computer aided disease detection system for gastrointestinal examinations. , 2016, , .		11

#	ARTICLE	IF	CITATIONS
127	Multimedia and Medicine. , 2016, , .		35
128	Heimdallr. , 2016, , .		3
129	OpenVQ. , 2016, , .		3
130	Expert driven semi-supervised elucidation tool for medical endoscopic videos. , 2015, , .		9
131	Mobile Picture Guess: A Crowdsourced Serious Game for Simulating Human Perception. Lecture Notes in Computer Science, 2015, , 461-468.	1.3	1
132	Gone. , 2014, , .		0
133	How 'How' Reflects What's What. , 2014, , .		18
134	Exploration of Different Time Series Models for Soccer Athlete Performance Prediction. , 0, , .		1