Andrew Markham

List of Publications by Year
in descending order

108 papers	4,246 citations	279798 23 h-index	265206 42 g-index
108 all docs	108 docs citations	108 times ranked	3170 citing authors

#	Article	IF	Citations
1	Multiscale Human Activity Recognition and Anticipation Network. IEEE Transactions on Neural Networks and Learning Systems, 2024, 35, 451-465.	11.3	3
2	Learning Selective Sensor Fusion for State Estimation. IEEE Transactions on Neural Networks and Learning Systems, 2024, , 1-15.	11.3	7
3	iMag+: An Accurate and Rapidly Deployable Inertial Magneto-Inductive SLAM System. IEEE Transactions on Mobile Computing, 2022, 21, 3644-3655.	5.8	2
4	Graph-Based Thermalâ€“Inertial SLAM With Probabilistic Neural Networks. IEEE Transactions on Robotics, 2022, 38, 1875-1893.	10.3	16
5	Acoustic localisation of wildlife with low-cost equipment: lower sensitivity, but no loss of precision. Wildlife Research, 2022, 49, 372-381.	1.4	5
6	PointLoc: Deep Pose Regressor for LiDAR Point Cloud Localization. IEEE Sensors Journal, 2022, 22, 959-968.	4.7	18
7	DeepAoANet: Learning Angle of Arrival From Software Defined Radios With Deep Neural Networks. IEEE Access, 2022, 10, 3164-3176.	4.2	12
8	SensatUrban: Learning Semantics from Urban-Scale Photogrammetric Point Clouds. International Journal of Computer Vision, 2022, 130, 316-343.	15.6	34
9	SelfVIO: Self-supervised deep monocular Visualâ€“Inertial Odometry and depth estimation. Neural Networks, 2022, 150, 119-136.	5.9	36
10	You Only Train Once: Learning General and Distinctive 3D Local Descriptors. IEEE Transactions on Pattern Analysis and Machine Intelligence, 2022, , 1-18.	13.9	4
11	Deep Odometry Systems on Edge with EKF-LoRa Backend for Real-Time Indoor Positioning. , 2022, , .		4
12	Vocal discrimination of African lions and its potential for collar-free tracking. Bioacoustics, 2021, 30, 575-593.	1.7	12
13	Learning With Stochastic Guidance for Robot Navigation. IEEE Transactions on Neural Networks and Learning Systems, 2021, 32, 166-176.	11.3	23
14	Milli-RIO: Ego-Motion Estimation With Low-Cost Millimetre-Wave Radar. IEEE Sensors Journal, 2021, 21, 3314-3323.	4.7	52
15	Deep Neural Network Based Inertial Odometry Using Low-Cost Inertial Measurement Units. IEEE Transactions on Mobile Computing, 2021, 20, 1351-1364.	5.8	42
16	CARACAL: a versatile passive acoustic monitoring tool for wildlife research and conservation. Bioacoustics, 2021, 30, 41-57.	1.7	23
17	Wirelessly Powered Embedded Sensor Nodes for Internal Structural Health Monitoring. IEEE Transactions on Industrial Electronics, 2021, , 1-1.	7.9	15
18	The influence of spatial features and atmospheric conditions on African lion vocal behaviour. Animal Behaviour, 2021, 174, 63-76.	1.9	5

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19	Human tracking and identification through a millimeter wave radar. Ad Hoc Networks, 2021, 116, 102475.	5.5	24
20	Seismic localization of elephant rumbles as a monitoring approach. Journal of the Royal Society Interface, 2021, 18, 20210264.	3.4	8
21	DynaNet: Neural Kalman Dynamical Model for Motion Estimation and Prediction. IEEE Transactions on Neural Networks and Learning Systems, 2021, 32, 5479-5491.	11.3	19
22	Sensor Fusion for Magneto-Inductive Navigation. IEEE Sensors Journal, 2020, 20, 386-396.	4.7	3
23	Robust Attentional Aggregation of Deep Feature Sets for Multi-view 3D Reconstruction. International Journal of Computer Vision, 2020, 128, 53-73.	15.6	68
24	FootSLAM meets Adaptive Thresholding. IEEE Sensors Journal, 2020, , 1-1.	4.7	10
25	Learning distributed communication and computation in the IoT. Computer Communications, 2020, 161, 150-159.	5.1	2
26	SnapNav: Learning Mapless Visual Navigation with Sparse Directional Guidance and Visual Reference. , 2020, , .		7
27	Heart Rate Sensing with a Robot Mounted mmWave Radar. , 2020, , .		30
28	RandLA-Net: Efficient Semantic Segmentation of Large-Scale Point Clouds. , 2020, , .		776
29	Deep Emergent Communication for the IoT. , 2020, , .		0
30	Deep-Learning-Based Pedestrian Inertial Navigation: Methods, Data Set, and On-Device Inference. IEEE Internet of Things Journal, 2020, 7, 4431-4441.	8.7	75
31	DeepTIO: A Deep Thermal-Inertial Odometry With Visual Hallucination. IEEE Robotics and Automation Letters, 2020, 5, 1672-1679.	5.1	37
32	milliEgo. , 2020, , .		53
33	See through smoke. , 2020, , .		76
34	Deep learning for fast simulation of seismic waves in complex media. Solid Earth, 2020, 11, 1527-1549.	2.8	63
35	AtLoc: Attention Guided Camera Localization. Proceedings of the AAAI Conference on Artificial Intelligence, 2020, 34, 10393-10401.	4.9	73
36	Indoor positioning system in visually-degraded environments with millimetre-wave radar and inertial sensors. , 2020, , .		1

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37	Visual SLAM and Structure from Motion in Dynamic Environments. ACM Computing Surveys, 2019, 51, 1-36.	23.0	253
38	Distributed Communicating Neural Network Architecture for Smart Environments. , 2019, , .		2
39	Autonomous Learning of Speaker Identity and WiFi Geofence From Noisy Sensor Data. IEEE Internet of Things Journal, 2019, 6, 8284-8295.	8.7	6
40	Map-aided Navigation for Emergency Searches. , 2019, , .		4
41	MotionTransformer: Transferring Neural Inertial Tracking between Domains. Proceedings of the AAAI Conference on Artificial Intelligence, 2019, 33, 8009-8016.	4.9	32
42	Zero-Velocity Detectionâ€"A Bayesian Approach to Adaptive Thresholding. , 2019, 3, 1-4.		53
43	Learning Monocular Visual Odometry through Geometry-Aware Curriculum Learning. , 2019, , .		31
44	mID: Tracking and Identifying People with Millimeter Wave Radar. , 2019, , .		145
45	GANVO: Unsupervised Deep Monocular Visual Odometry and Depth Estimation with Generative Adversarial Networks. , 2019, , .		89
46	Autonomous Learning for Face Recognition in the Wild via Ambient Wireless Cues. , 2019, , .		7
47	DeepPCO: End-to-End Point Cloud Odometry through Deep Parallel Neural Network. , 2019, , .		34
48	Selective Sensor Fusion for Neural Visual-Inertial Odometry. , 2019, , .		80
49	Distilling Knowledge From a Deep Pose Regressor Network. , 2019, , .		58
50	Dense 3D Object Reconstruction from a Single Depth View. IEEE Transactions on Pattern Analysis and Machine Intelligence, 2019, 41, 2820-2834.	13.9	72
51	iSCAN. , 2019, , .		1
52	Snoopy. , 2018, 1, 1-29.		19
53	Identifying Sources and Sinks in the Presence of Multiple Agents with Gaussian Process Vector Calculus. , 2018, , .		1
54	Listening to Lions: Animal-Borne Acoustic Sensors Improve Bio-logger Calibration and Behaviour Classification Performance. Frontiers in Ecology and Evolution, 2018, 6, .	2.2	20

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55	Deepauth. , 2018, , .		12
56	Learning 3D Scene Semantics and Structure from a Single Depth Image. , 2018, , .		4
57	Automatic Face Recognition Adaptation via Ambient Wireless Identifiers. , 2018, , .		0
58	Towards an enterprise architecture controlling framework. , 2018, , .		2
59	iMag: Accurate and Rapidly Deployable Inertial Magneto-Inductive Localisation. , 2018, , .		5
60	DEFO-NET: Learning Body Deformation Using Generative Adversarial Networks. , 2018, , .		5
61	Learning with Training Wheels: Speeding up Training with a Simple Controller for Deep Reinforcement Learning. , 2018, , .		47
62	In situ behavioral plasticity as compensation for weather variability: implications for future climate change. Climatic Change, 2018, 149, 457-471.	3.6	16
63	Advances and Challenges in Underground Sensing. , 2018, , 357-415.		1
64	3D-PhysNet: Learning the Intuitive Physics of Non-Rigid Object Deformations. , 2018, , .		8
65	3-D Displacement Measurement for Structural Health Monitoring Using Low-Frequency Magnetic Fields. IEEE Sensors Journal, 2017, 17, 1165-1174.	4.7	10
66	SCAN. , 2017, , .		13
67	Getting to the core: Internal body temperatures help reveal the ecological function and thermal implications of the lionsâ€™ mane. Ecology and Evolution, 2017, 7, 253-262.	1.9	10
68	An activeâ€radioâ€frequencyâ€identification system capable of identifying coâ€locations and socialâ€structure: Validation with a wild freeâ€ranging animal. Methods in Ecology and Evolution, 2017, 8, 1822-1831.	5.2	22
69	Tracking People in Highly Dynamic Industrial Environments. IEEE Transactions on Mobile Computing, 2017, 16, 2351-2365.	5.8	19
70	3D Object Reconstruction from a Single Depth View with Adversarial Learning. , 2017, , .		122
71	VeriNet. , 2017, , .		12
72	GraphTinker: Outlier rejection and inlier injection for pose graph SLAM. , 2017, , .		8

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73	VidLoc: A Deep Spatio-Temporal Model for 6-DoF Video-Clip Relocalization. , 2017, , .		145
74	Towards Self-supervised Face Labeling via Cross-modality Association. , 2017, , .		2
75	Use of triâ€axial accelerometers to assess terrestrial mammal behaviour in the wild. Journal of Zoology, 2016, 298, 257-265.	1.7	37
76	Increasing the efficiency of 6-DoF visual localization using multi-modal sensory data. , 2016, , .		7
77	Impact of Rocks and Minerals on Underground Magneto-Inductive Communication and Localization. IEEE Access, 2016, 4, 3999-4010.	4.2	49
78	RePWR. , 2016, , .		1
79	Magnetic Induction-Based Positioning in Distorted Environments. IEEE Transactions on Geoscience and Remote Sensing, 2016, 54, 4605-4612.	6.3	12
80	Underground Incrementally Deployed Magneto-Inductive 3-D Positioning Network. IEEE Transactions on Geoscience and Remote Sensing, 2016, 54, 4376-4391.	6.3	37
81	Reducing magneto-inductive positioning errors in a metal-rich indoor environment. , 2015, , .		5
82	Robust Indoor Positioning With Lifelong Learning. IEEE Journal on Selected Areas in Communications, 2015, 33, 2287-2301.	14.0	40
83	Robust vision-based indoor localization. , 2015, , .		8
84	Accurate Positioning via Cross-Modality Training. , 2015, , .		21
85	A new Magnetoâ€Inductive tracking technique to uncover subterranean activity: what do animals do underground?. Methods in Ecology and Evolution, 2015, 6, 510-520.	5.2	27
86	Distortion Rejecting Magneto-Inductive Three-Dimensional Localization (MagLoc). IEEE Journal on Selected Areas in Communications, 2015, 33, 2404-2417.	14.0	51
87	Indoor Tracking Using Undirected Graphical Models. IEEE Transactions on Mobile Computing, 2015, 14, 2286-2301.	5.8	39
88	Non-Line-of-Sight Identification and Mitigation Using Received Signal Strength. IEEE Transactions on Wireless Communications, 2015, 14, 1689-1702.	9.2	211
89	Accuracy Estimation for Sensor Systems. IEEE Transactions on Mobile Computing, 2015, 14, 1330-1343.	5.8	15
90	Fusion of Radio and Camera Sensor Data for Accurate Indoor Positioning. , 2014, , .		26

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91	Robust pedestrian dead reckoning (R-PDR) for arbitrary mobile device placement. , 2014, , .		47
92	Climate and the Individual: Inter-Annual Variation in the Autumnal Activity of the European Badger (Meles meles). PLoS ONE, 2014, 9, e83156.	2.5	43
93	Lightweight map matching for indoor localisation using conditional random fields. , 2014, , .		85
94	Identification and mitigation of non-line-of-sight conditions using received signal strength. , 2013, , .		22
95	Comparison of Accuracy Estimation Approaches for Sensor Networks. , 2013, , .		5
96	Human interactive secure key and identity exchange protocols in body sensor networks. IET Information Security, 2013, 7, 30-38.	1.7	16
97	WILDSENSING. ACM Transactions on Sensor Networks, 2012, 8, 1-33.	3.6	63
98	Characterization of non-line-of-sight (NLOS) bias via analysis of clutter topology. , 2012, , .		5
99	Magneto-inductive networked rescue system (MINERS). , 2012, , .		59
100	Underground Localization in 3-D Using Magneto-Inductive Tracking. IEEE Sensors Journal, 2012, 12, 1809-1816.	4.7	69
101	Human Interactive Secure ID Management in Body Sensor Networks. Journal of Networks, 2012, 7, .	0.4	18
102	Body sensor network key distribution using human interactive channels. , 2011, , .		5
103	Evolution and sustainability of a wildlife monitoring sensor network. , 2010, , .		109
104	Revealing the hidden lives of underground animals using magneto-inductive tracking. , 2010, , .		53
105	Magneto-inductive tracking of underground animals. , 2010, , .		0
106	Discrete Gene Regulatory Networks (dGRNs): A Novel Approach to Configuring Sensor Networks. , 2010, , .		19
107	Wildlife and environmental monitoring using RFID and WSN technology. , 2009, , .		16
108	The Adaptive Social Hierarchy - A Self Organizing Network Based on Naturally Occurring Structures. , 2006, , .		18