Maurice D Mulvenna

List of Publications by Year
in descending order

173 papers	3,352 citations	218381 26 h-index	205818 48 g-index
188 all docs	188 docs citations	188 times ranked	2957 citing authors

#	Article	IF	Citations
1	Personalization on the Net using Web mining: introduction. Communications of the ACM, 2000, 43, 122-125.	3.3	265
2	Review of ICT-based services for identified unmet needs in people with dementia. Ageing Research Reviews, 2007, 6, 223-246.	5.0	241
3	Discovering Internet marketing intelligence through online analytical web usage mining. SIGMOD Record, 1998, 27, 54-61.	0.7	209
4	Evidential fusion of sensor data for activity recognition in smart homes. Pervasive and Mobile Computing, 2009, 5, 236-252.	2.1	189
5	Improved lexicon-based sentiment analysis for social media analytics. Security Informatics, 2015, 4, .	2.5	105
6	Usability of a new electronic assistive device for community-dwelling persons with mild dementia. Aging and Mental Health, 2012, 16, 584-591.	1.5	90
7	Using Data Mining to Predict Hospital Admissions From the Emergency Department. IEEE Access, 2018, 6, 10458-10469.	2.6	88
8	A Low Cost Indoor Positioning System Using Bluetooth Low Energy. IEEE Access, 2020, 8, 136858-136871.	2.6	73
9	Towards a chatbot for digital counselling. , 2017, , .		72
10	Reliability of Supervised Machine Learning Using Synthetic Data in Health Care: Model to Preserve Privacy for Data Sharing. JMIR Medical Informatics, 2020, 8, e18910.	1.3	70
11	Experiences in the development of a Smart Lab. International Journal of Biomedical Engineering and Technology, 2009, 2, 319.	0.2	66
12	A review of the role of assistive technology for people with dementia in the hours of darkness. Technology and Health Care, 2009, 17, 281-304.	0.5	58
13	A user driven approach to develop a cognitive prosthetic to address the unmet needs of people with mild dementia. Pervasive and Mobile Computing, 2009, 5, 253-267.	2.1	56
14	Principles for fostering the transdisciplinary development of assistive technologies. Disability and Rehabilitation: Assistive Technology, 2017, 12, 480-490.	1.3	56
15	Aggregated topic models for increasing social media topic coherence. Applied Intelligence, 2020, 50, 138-156.	3.3	56
16	A qualitative study of the lived experiences of disabled post-transition students in higher education institutions in Northern Ireland. Studies in Higher Education, 2013, 38, 1334-1350.	2.9	55
17	Semantic Smart Homes: Towards Knowledge Rich Assisted Living Environments. Studies in Computational Intelligence, 2009, , 279-296.	0.7	52
18	Keyword-Based Sentiment Mining using Twitter. International Journal of Ambient Computing and Intelligence, 2013, 5, 56-69.	0.8	48

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19	Visualization of data for ambient assisted living services. , 2011, 49, 110-117.		42
20	Participatory Research to Design a Novel Telehealth System to Support the Night-Time Needs of People with Dementia: NOCTURNAL. International Journal of Environmental Research and Public Health, 2013, 10, 6764-6782.	1.2	41
21	Views of Caregivers on the Ethics of Assistive Technology Used for Home Surveillance of People Living with Dementia. Neuroethics, 2017, 10, 255-266.	1.7	41
22	Assessing the Usability of a Chatbot for Mental Health Care. Lecture Notes in Computer Science, 2019, , 121-132.	1.0	39
23	Using Mobile Technology to Provide Personalized Reminiscence for People Living With Dementia and Their Carers: Appraisal of Outcomes From a Quasi-Experimental Study. JMIR Mental Health, 2018, 5, e57.	1.7	39
24	Flexible context aware interface for ambient assisted living. Human-centric Computing and Information Sciences, 2014, 4, .	6.1	36
25	â€˜There is still so much insideâ€™: The impact of personalised reminiscence, facilitated by a tablet device, on people living with mild to moderate dementia and their family carers. Dementia, 2020, 19, 1131-1150.	1.0	35
26	Smart Wireless Continence Management System for Persons with Dementia. Telemedicine Journal and E-Health, 2008, 14, 825-832.	1.6	33
27	homeML â€" An Open Standard for the Exchange of Data Within Smart Environments. , 2007, , 121-129.		33
28	Data and Information Quality Issues in Ambient Assisted Living Systems. Journal of Data and Information Quality, 2012, 4, 1-15.	1.5	32
29	Home Based Assistive Technologies for People with Mild Dementia. , 2007, , 63-69.		31
30	Assessing usability testing for people living with dementia. , 2016, , .		30
31	Designing & evaluating a cognitive prosthetic for people with mild dementia. , 2010, , .		28
32	User-Driven Navigation Pattern Discovery from Internet Data. Lecture Notes in Computer Science, 2000, , 74-91.	1.0	26
33	Using Event Calculus for Behaviour Reasoning and Assistance in a Smart Home. Lecture Notes in Computer Science, 2008, , 81-89.	1.0	26
34	Healthcare Systems and Other Applications. IEEE Pervasive Computing, 2007, 6, 59-63.	1.1	24
35	Ethical by Design. , 2017, , .		23
36	Data analytics of call log data to identify caller behaviour patterns from a mental health and well-being helpline. Health Informatics Journal, 2019, 25, 1722-1738.	1.1	20

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37	Monitoring and analysis of sleep pattern for people with early dementia. , 2010, , .		19
38	Evaluating User Engagement with a Reminiscence App Using Cross-Comparative Analysis of User Event Logs and Qualitative Data. Cyberpsychology, Behavior, and Social Networking, 2019, 22, 543-551.	2.1	19
39	Meaningful Big Data Integration for a Global COVID-19 Strategy. IEEE Computational Intelligence Magazine, 2020, 15, 51-61.	3.4	19
40	Ethical Issues in Democratizing Digital Phenotypes and Machine Learning in the Next Generation of Digital Health Technologies. Philosophy and Technology, 2021, 34, 1945-1960.	2.6	19
41	An Oil Well Dataset Derived from Satellite-Based Remote Sensing. Remote Sensing, 2021, 13, 1132.	1.8	19
42	The next generation of mobile medication management solutions. International Journal of Electronic Healthcare, 2007, 3, 7.	0.2	18
43	Decision Support for Alzheimer's Patients in Smart Homes. , 2008, , .		18
44	Prediction of chemical compounds properties using a deep learning model. Neural Computing and Applications, 2021, 33, 13345-13366.	3.2	18
45	Review of ICT-Based Services for Identified Unmet Needs in People with Dementia. Advanced Information and Knowledge Processing, 2010, , 37-61.	0.2	18
46	Ecological Momentary Assessment Within a Digital Health Intervention for Reminiscence in Persons With Dementia and Caregivers: User Engagement Study. JMIR MHealth and UHealth, 2020, 8, e17120.	1.8	18
47	Behavior of Callers to a Crisis Helpline Before and During the COVID-19 Pandemic: Quantitative Data Analysis. JMIR Mental Health, 2020, 7, e22984.	1.7	18
48	A hybrid knowledge-based system for strategic purchasing. Expert Systems With Applications, 1997, 12, 497-512.	4.4	17
49	Does Age Make a Difference in the Behaviour of Online Social Network Users?. , 2011, , .		16
50	Engaging user communities with eParticipation technology: findings from a European project. Technology Analysis and Strategic Management, 2013, 25, 281-294.	2.0	16
51	Chatbots to Support Mental Wellbeing of People Living in Rural Areas: Can User Groups Contribute to Co-design?. Journal of Technology in Behavioral Science, 2021, 6, 652-665.	1.3	16
52	Machine learning using synthetic and real data: Similarity of evaluation metrics for different healthcare datasets and for different algorithms. , 2018, , .		16
53	Development of a cell phone-based video streaming system for persons with early stage Alzheimer's disease. , 2008, 2008, 5330-3.		15
54	Data-Driven Marketing. Electronic Markets, 1998, 8, 32-35.	4.4	14

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55	HomeCI - A visual editor for healthcare professionals in the design of home based care. Annual International Conference of the IEEE Engineering in Medicine and Biology Society, 2007, 2007, 2787-90.	0.5	14
56	Insights into Antidepressant Prescribing Using Open Health Data. Big Data Research, 2018, 12, 41-48.	2.6	14
57	Data mining and XML: current and future issues. , 0, , .		13
58	Investigating the use of brain-computer interaction to facilitate creativity. , 2012, , .		13
59	Realistic expectations with brain computer interfaces. Journal of Assistive Technologies, 2012, 6, 233-244.	0.9	13
60	Twitter Sentiment Analysis for Security-Related Information Gathering. , 2014, , .		13
61	Contrasting levels of accuracy in command interaction sequences for a domestic brain-computer interface using SSVEP. , 2010, , .		12
62	Night optimised care technology for users needing assisted lifestyles. Behaviour and Information Technology, 2014, 33, 1261-1277.	2.5	12
63	Knowledge Networks. Lecture Notes in Computer Science, 2006, , 99-114.	1.0	12
64	Supporting People with Dementia Using Pervasive Healthcare Technologies. Advanced Information and Knowledge Processing, 2010, , 3-14.	0.2	12
65	Exploring the Relationship Between Online Social Network Site Usage and the Impact on Quality of Life for Older and Younger Users: An Interaction Analysis. Journal of Medical Internet Research, 2016, 18, e245.	2.1	12
66	The impact of the <scp>COVID</scp>â€19 pandemic on grocery shopper behaviour: Analysis of shopper behaviour change using store transaction data. Journal of Consumer Behaviour, 2022, 21, 259-271.	2.6	12
67	The development of personalised cognitive prosthetics. , 2008, 2008, 787-90.		11
68	A user centred approach for developing Brain-Computer Interfaces. , 2010, , .		11
69	Self-Organized Data Ecologies for Pervasive Situation-Aware Services: The Knowledge Networks Approach. IEEE Transactions on Systems, Man and Cybernetics, Part A: Systems and Humans, 2010, 40, 789-802.	3.4	10
70	Multi-faceted informatics system for digitising and streamlining the reablement care model. Journal of Biomedical Informatics, 2015, 56, 30-41.	2.5	10
71	Multivariate Testing Confirms the Effect of Ageâ€"Gender Congruence on Click-Through Rates from Online Social Network Digital Advertisements. Cyberpsychology, Behavior, and Social Networking, 2018, 21, 646-654.	2.1	10
72	Digital reminiscence app coâ€created by people living with dementia and carers: Usability and eye gaze analysis. Health Expectations, 2021, 24, 1207-1219.	1.1	10

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73	An intervention mechanism for assistive living in smart homes. Journal of Ambient Intelligence and Smart Environments, 2010, 2, 233-252.	0.8	9
74	Towards Intelligent and Self-Evolving Network Infrastructures for Energy Management. , 2010, , .		9
75	A sleep pattern analysis and visualization system to support people with early dementia. , 2011, , .		9
76	Dynamic similarityâ€based activity detection and recognition within smart homes. International Journal of Pervasive Computing and Communications, 2012, 8, 264-278.	1.1	9
77	Perceived barriers to participation in R&D programmes for SMEs within the European Union. Technology Analysis and Strategic Management, 2013, 25, 329-339.	2.0	9
78	Behavioural Usage Analysis of a Reminiscing App for People Living with Dementia and their Carers. , 2017, , .		9
79	Exploring temporal behaviour of app users completing ecological momentary assessments using mental health scales and mood logs. Behaviour and Information Technology, 2019, 38, 1016-1027.	2.5	9
80	Predicting Caller Type From a Mental Health and Well-Being Helpline: Analysis of Call Log Data. JMIR Mental Health, 2018, 5, e47.	1.7	9
81	Using context awareness within the â€˜Smart homeâ€™ environment to support social care for adults with dementia. Technology and Disability, 2007, 19, 143-152.	0.3	8
82	Towards developing effective Continence Management through wetness alert diaper: Experiences, lessons learned, challenges and future directions. , 2010, , .		8
83	A Framework for the Development of a Dynamic Adaptive Intelligent User Interface to Enhance the User Experience. , 2019, , .		8
84	Why do people call crisis helplines? Identifying taxonomies of presenting reasons and discovering associations between these reasons. Health Informatics Journal, 2020, 26, 2597-2613.	1.1	8
85	Challenges and research directions in autonomic communications. International Journal of Internet Protocol Technology, 2007, 2, 3.	0.2	7
86	Meaningful Integration of Data, Analytics and Services of Computer-Based Medical Systems: The MIDAS Touch. , 2019, , .		7
87	Design of a Smart Continence Management System Based on Initial User Requirement Assessment. Lecture Notes in Computer Science, 2008, , 62-72.	1.0	7
88	Functional Requirements for Assistive Technology for People with Cognitive Impairments and Dementia. Communications in Computer and Information Science, 2012, , 146-151.	0.4	7
89	Towards Pervasive Supervision for Autonomic Systems. , 2006, , .		6
90	HomeRuleML - A Model for the Exchange of Decision Support Rules Within Smart Environments. , 2007, , .		6

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91	Brain Computer Interfaces for inclusion. , 2010, , .		6
92	Multi-agent Interactions for Ambient Assisted Living. , 2011, , .		6
93	SenseCare: Using Affective Computing to Manage and Care for the Emotional Wellbeing of Older People. Lecture Notes of the Institute for Computer Sciences, Social-Informatics and Telecommunications Engineering, 2017, , 352-356.	0.2	6
94	Dynamic and Contextualised Behavioural Knowledge in Autonomic Communications. Lecture Notes in Computer Science, 2005, , 217-228.	1.0	6
95	Usability Evaluation of a Co-created Big Data Analytics Platform for Health Policy-Making. Lecture Notes in Computer Science, 2019, , 194-207.	1.0	6
96	Towards Chatbots to Support Bibliotherapy Preparation and Delivery. Lecture Notes in Computer Science, 2020, , 127-142.	1.0	6
97	Uncertain Information Management for ADL Monitoring in Smart Homes. Studies in Computational Intelligence, 2009, , 315-332.	0.7	6
98	The Application of User Event Log Data for Mental Health and Wellbeing Analysis. , 0, , .		6
99	HomeADL for adaptive ADL monitoring within smart homes. , 2008, 2008, 3324-7.		5
100	Knowledge networks for pervasive services. , 2009, , .		5
101	ICT Interface Design for Ageing People and People with Dementia. Advanced Information and Knowledge Processing, 2010, , 165-188.	0.2	5
102	Cognitive Sensor Networks: Towards Self-Adapting Ambient Intelligence for Pervasive Healthcare. , 2011, , .		5
103	Participatory design-based requirements elicitation involving people living with dementia towards a home-based platform to monitor emotional wellbeing. , 2017, , .		5
104	State of the Art in Electronic Assistive Technologies for People with Dementia. Advanced Information and Knowledge Processing, 2010, , 23-35.	0.2	5
105	SenseCare: Towards an Experimental Platform for Home-Based, Visualisation of Emotional States of People with Dementia. Lecture Notes in Computer Science, 2016, , 63-74.	1.0	5
106	On the Deployment of Web Usage Mining. Lecture Notes in Computer Science, 2004, , 23-42.	1.0	5
107	Assessment of the Impact of Sensor Failure in the Recognition of Activities of Daily Living. Lecture Notes in Computer Science, 2008, , 136-144.	1.0	5
108	How Machine Learning Classification Accuracy Changes in a Happiness Dataset with Different Demographic Groups. Computers, 2022, 11, 83.	2.1	5

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109	Bridging practices, theories, and technologies to support reminiscence. , 2011, , .		4
110	Knowledge discovery from activity monitoring to support independent living of people with early dementia. , 2012, , .		4
111	Digital technology in healthcare and elderly care. , 2017, , .		4
112	Unsupervised Sentiment Classification: A Hybrid Sentiment-Topic Model Approach. , 2017, , .		4
113	Economic costs and health-related quality of life associated with individual specific reminiscence: Results from the InspireD Feasibility Study. Dementia, 2020, 19, 2166-2183.	1.0	4
114	Reliability of Addenbrooke's Cognitive Examination III in differentiating between dementia, mild cognitive impairment and older adults who have not reported cognitive problems. European Journal of Ageing, 2022, 19, 495-507.	1.2	4
115	Integration of case based retrieval with a relational database system in Aircraft Technical Support. Lecture Notes in Computer Science, 1995, , 1-10.	1.0	4
116	Ambient Interface Design (AID) for the Ergonomically Challenged. International Journal of Ambient Computing and Intelligence, 2010, 2, 57-64.	0.8	4
117	Multi-agent System Feedback and Support for Ambient Assisted Living. , 2012, , .		3
118	Toxicity Prediction Using Pre-trained Autoencoder. , 2018, , .		3
119	Discovering and comparing types of general practitioner practices using geolocational features and prescribing behaviours by means of K-means clustering. Scientific Reports, 2021, 11, 18289.	1.6	3
120	Evaluation of Mobile and Home Based Cognitive Prosthetics. Lecture Notes in Computer Science, 2008, , 18-25.	1.0	3
121	Towards Standardized User and Application Interfaces for the Brain Computer Interface. Lecture Notes in Computer Science, 2011, , 573-582.	1.0	3
122	The Role of Context-Aware Computing in Support of People with Dementia. Advanced Information and Knowledge Processing, 2010, , 131-143.	0.2	3
123	An Examination of the Behaviour of Young and Older Users of Facebook. Lecture Notes of the Institute for Computer Sciences, Social-Informatics and Telecommunications Engineering, 2012, , 9-16.	0.2	3
124	Behaviour Analytics of Users Completing Ecological Momentary Assessments in the Form of Mental Health Scales and Mood Logs on a Smartphone App. , 2019, , .		3
125	Knowledge-based assistance for contract compliance [power stations]. IEEE Intelligent Systems, 1997, 12, 58-64.	1.1	2
126	Using context prediction for self-management in ubiquitous computing environments. , 0, , .		2

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127	Self-organizing knowledge networks for pervasive situation-aware services. , 2007, , .		2
128	Autonomic supervision of stigmergic self-organisation for distributed information retrieval. , 2007, , .		2
129	Smart wireless continence management system for elderly with dementia. , 2008, , .		2
130	Autonomic Re-configuration of Pervasive Supervision Services. , 2009, , .		2
131	Towards sustainable business models from healthcare technology research. International Journal of Computers in Healthcare, 2010, 1, 20.	0.5	2
132	Towards self-managing systems inspired by economic organizations. , 2010, , .		2
133	A pattern analysis and visualisation system for sleep monitoring in ambient assisted living environment. International Journal of Computers in Healthcare, 2012, 1, 320.	0.5	2
134	Discovering social behaviour variances of younger and older users through social interaction analysis. International Journal of Web Science, 2013, 2, 44.	0.8	2
135	How Usable Are Usability Tests? Examining the Suitability of Standard Usability Testing Methods for the Assessment of Apps for People Living with Dementia. Communications in Computer and Information Science, 2019, , 126-143.	0.4	2
136	Living Labs Are Innovation Catalysts. Smart Innovation, Systems and Technologies, 2011, , 253-264.	0.5	2
137	NOCTURNAL Ambient Assisted Living. Lecture Notes in Computer Science, 2011, , 350-354.	1.0	2
138	Frequency domain analysis of telephone helpline call data. , 2018, , .		2
139	User Archetype Discovery By Cluster Analysis of Caller Log Data: Tenure Evolution is Stable as Time Period Reduces. , 2019, , .		2
140	Co-creating Requirements and Assessing End-User Acceptability of a Voice-Based Chatbot to Support Mental Health: A Thematic Analysis of a Living Lab Workshop. Lecture Notes in Electrical Engineering, 2021, , 201-212.	0.3	2
141	Quality of data measurements in the big data era: Lessons learned from MIDAS project. IEEE Instrumentation and Measurement Magazine, 2020, 23, 18-24.	1.2	2
142	Utilizing Stigmergy in Support of Autonomic Principles. , 2007, , .		1
143	Utilizing Stigmergy in Support of Autonomic Principles. , 2007, , .		1
144	A computational intelligence method for traversing dynamically constructed networks of knowledge. Telecommunication Systems, 2009, 40, 27-37.	1.6	1

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145	An infrastructure for developing self-organising services. International Journal of Adaptive and Innovative Systems, 2009, 1, 88.	0.1	1
146	Assessing the accessibility of a domestic Brain Computer Interface and the implications for future design choices. , 2010, , .		1
147	Technical development and clinical evaluation of intelligent continence management system at nursing home. , 2010, , .		1
148	The NOCTURNAL Ambient Assisted Living System. , 2011, , .		1
149	Dynamic multi-component based activity detection and recognition within smart homes. , 2011, , .		1
150	A method for assessing the usability of an on screen display for a brain-computer interface. International Journal of Computers in Healthcare, 2014, 2, 43.	0.5	1
151	Autonomic Supervision of Stigmergic Self-Organisation for Distributed Information Retrieval. , 2007, , .		1
152	Transferring research and innovation Living Lab (TRAIL): Experience of a living lab. Gerontechnology, 2010, 9, .	0.0	1
153	Discovering the Social Interaction Patterns of Younger and Older Facebook Users. Lecture Notes in Computer Science, 2012, , 295-303.	1.0	1
154	Identifying the Barriers and Enablers for Supporting Learners with Special Needs in Higher Education. Advances in Higher Education and Professional Development Book Series, 2014, , 467-485.	0.1	1
155	Triple Helix Engagement with Users. International Journal of Innovation in the Digital Economy, 2014, 5, 51-70.	0.2	1
156	UX-Handle: A Cloud-based System to Streamline Usability Testing Analytics. , 2017, , .		1
157	A Content and Knowledge Management System Supporting Emotion Detection from Speech. Lecture Notes in Electrical Engineering, 2021, , 369-378.	0.3	1
158	Introducing a light-weight autonomic network middleware based on stigmergic mechanisms. Annales Des Telecommunications/Annals of Telecommunications, 2006, 61, 1005-1016.	1.6	0
159	Assisted Living Services for Reminding and Prompting Activities of Daily Living: A Preliminary Case Study. , 2011, , .		0
160	Teaching Ethical Design in the Era of Autonomous and Intelligent Systems. , 2018, , .		0
161	Popular topics in HCI: Special Issue of Selected Extended Papers from the 32nd International BCS Human Computer Interaction Conference. Interacting With Computers, 2019, 31, 113-115.	1.0	0
162	An analysis of the impact of suicide prevention messages and memorials on motorway bridges. Suicide and Life-Threatening Behavior, 2021, 51, 657-664.	0.9	0

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163	Autonomic Computing. , 2008, , 66-71.		0
164	Ambient Communication Experience (ACE). International Journal of Ambient Computing and Intelligence, 2009, 1, 53-58.	0.8	0
165	Holistic night-time care. Gerontechnology, 2010, 9, .	0.0	0
166	Monitoring and visualising of night time activity patterns of people with early dementia. International Journal of Integrated Care, 2011, 11, .	0.1	0
167	Telehealth: supporting self-management of health and community based care. International Journal of Integrated Care, 2011, 11, .	0.1	0
168	The Use of Twitter by Local Government in Northern Ireland. Communications in Computer and Information Science, 2014, , 93-106.	0.4	0
169	Contemporary Gold Rush or Scientific Advancement. Advances in Computational Intelligence and Robotics Book Series, 2015, , 210-226.	0.4	0
170	Towards the Integration of Prescription Analytics into Health Policy and General Practice. Lecture Notes in Computer Science, 2017, , 193-206.	1.0	0
171	Aesthetically-Enhanced Visual Analytics Platform to Explore Patient Metadata. , 0, , .		0
172	Ambient Communication Experience (ACE), Information Interaction in Design Space. , 0, , 139-146.		0
173	Autonomous Querying for Knowledge Networks. Lecture Notes in Computer Science, 2008, , 249-263.	1.0	0