Diane J Cook

List of Publications by Year
in descending order

148 papers	9,255 citations	66315 42 h-index	43868 91 g-index
157 all docs	157 docs citations	157 times ranked	7687 citing authors

#	Article	IF	Citations
1	The Indoor Predictability of Human Mobility: Estimating Mobility With Smart Home Sensors. IEEE Transactions on Emerging Topics in Computing, 2023, 11, 182-193.	3.2	2
2	Partnering a Compensatory Application with Activity-Aware Prompting to Improve Use in Individuals with Amnestic Mild Cognitive Impairment: A Randomized Controlled Pilot Clinical Trial. Journal of Alzheimer's Disease, 2022, 85, 73-90.	1.2	8
3	Detecting Smartwatch-Based Behavior Change in Response to a Multi-Domain Brain Health Intervention. ACM Transactions on Computing for Healthcare, 2022, 3, 1-18.	3.3	4
4	Multimodal Fusion of Smart Home and Text-based Behavior Markers for Clinical Assessment Prediction. ACM Transactions on Computing for Healthcare, 2022, 3, 1-25.	3.3	3
5	Nurse-in-the-loop smart home detection of health events associated with diagnosed chronic conditions: A case-event series. International Journal of Nursing Studies Advances, 2022, 4, 100081.	0.9	4
6	Behavioral Differences Between Subject Groups Identified Using Smart Homes and Change Point Detection. IEEE Journal of Biomedical and Health Informatics, 2021, 25, 559-567.	3.9	13
7	A survey of deep network techniques all classifiers can adopt. Data Mining and Knowledge Discovery, 2021, 35, 46-87.	2.4	14
8	Fusing Ambient and Mobile Sensor Features Into a Behaviorome for Predicting Clinical Health Scores. IEEE Access, 2021, 9, 65033-65043.	2.6	12
9	Multi-Person Activity Recognition in Continuously Monitored Smart Homes. IEEE Transactions on Emerging Topics in Computing, 2021, , 1-1.	3.2	5
10	Indirectly Supervised Anomaly Detection of Clinically Meaningful Health Events from Smart Home Data. ACM Transactions on Intelligent Systems and Technology, 2021, 12, 1-18.	2.9	26
11	Remote Monitoring of the Performance Status and Burden of Symptoms of Patients With Gastrointestinal Cancer Via a Consumer-Based Activity Tracker: Quantitative Cohort Study. JMIR Cancer, 2021, 7, e22931.	0.9	3
12	Creating a digital memory notebook application for individuals with mild cognitive impairment to support everyday functioning. Disability and Rehabilitation: Assistive Technology, 2020, 15, 421-431.	1.3	11
13	Context-Aware Delivery of Ecological Momentary Assessment. IEEE Journal of Biomedical and Health Informatics, 2020, 24, 1206-1214.	3.9	13
14	Analyzing Sensor-Based Individual and Population Behavior Patterns via Inverse Reinforcement Learning. Sensors, 2020, 20, 5207.	2.1	3
15	Memory-Aware Active Learning in Mobile Sensing Systems. IEEE Transactions on Mobile Computing, 2020, 21, 1-1.	3.9	9
16	Computational Intelligence Techniques for Combating COVID-19: A Survey. IEEE Computational Intelligence Magazine, 2020, 15, 10-22.	3.4	26
17	Wearable Device-Independent Next Day Activity and Next Night Sleep Prediction for Rehabilitation Populations. IEEE Journal of Translational Engineering in Health and Medicine, 2020, 8, 1-9.	2.2	10
18	Study of Effectiveness of Prior Knowledge for Smart Home Kit Installation. Sensors, 2020, 20, 6145.	2.1	2

#	Article	IF	Citations
19	Using continuous sensor data to formalize a model of in-home activity patterns. Journal of Ambient Intelligence and Smart Environments, 2020, 12, 183-201.	0.8	5
20	Bridging the gap between performance-based assessment and self-reported everyday functioning: An ecological momentary assessment approach. Clinical Neuropsychologist, 2020, 34, 678-699.	1.5	33
21	sMRT: Multi-Resident Tracking in Smart Homes with Sensor Vectorization. IEEE Transactions on Pattern Analysis and Machine Intelligence, 2020, 43, 1-1.	9.7	14
22	Easing Power Consumption of Wearable Activity Monitoring with Change Point Detection. Sensors, 2020, 20, 310.	2.1	27
23	Cyber-physical Support of Daily Activities. ACM Transactions on Cyber-Physical Systems, 2020, 4, 1-24.	1.9	12
24	A Survey of Unsupervised Deep Domain Adaptation. ACM Transactions on Intelligent Systems and Technology, 2020, 11, 1-46.	2.9	400
25	Automated Smart Home Assessment to Support Pain Management: Multiple Methods Analysis. Journal of Medical Internet Research, 2020, 22, e23943.	2.1	16
26	Multi-Source Deep Domain Adaptation with Weak Supervision for Time-Series Sensor Data. , 2020, , .		45
27	Machine learning algorithm for activity-aware demand response considering energy savings and comfort requirements. IET Smart Grid, 2020, 3, 730-737.	1.5	6
28	Learning-Enabled Robotic Assistive Support: Understanding Older Adult Opinions and Comparing Them to Younger Adult Opinions. Gerontechnology, 2020, 19, .	0.0	0
29	A Robot Activity Support (RAS) system for persons with memory impairment: Comparing older and younger adults' perceptions of the system. Gerontechnology, 2020, 19, 1-11.	0.0	2
30	Technology-Enabled Assessment of Functional Health. IEEE Reviews in Biomedical Engineering, 2019, 12, 319-332.	13.1	33
31	Iterative Design of Visual Analytics for a Clinician-in-the-Loop Smart Home. IEEE Journal of Biomedical and Health Informatics, 2019, 23, 1742-1748.	3.9	19
32	Real-Time Change Point Detection with Application to Smart Home Time Series Data. IEEE Transactions on Knowledge and Data Engineering, 2019, 31, 1010-1023.	4.0	76
33	Utilizing Consumer-grade Wearable Sensors for Unobtrusive Rehabilitation Outcome Prediction. , 2019, , .		3
34	Enhancing activity recognition using CPD-based activity segmentation. Pervasive and Mobile Computing, 2019, 53, 75-89.	2.1	48
35	Diel variation of formaldehyde levels and other VOCs in homes driven by temperature dependent infiltration and emission rates. Building and Environment, 2019, 159, 106153.	3.0	22
36	SynSys: A Synthetic Data Generation System for Healthcare Applications. Sensors, 2019, 19, 1181.	2.1	83

#	Article	IF	Citations
37	Robot-enabled support of daily activities in smart home environments. Cognitive Systems Research, 2019, 54, 258-272.	1.9	79
38	Smart Home-Based Prediction of Multidomain Symptoms Related to Alzheimer's Disease. IEEE Journal of Biomedical and Health Informatics, 2018, 22, 1720-1731.	3.9	99
39	Implementing Wearable Sensors for Continuous Assessment of Daytime Heart Rate Response in Inpatient Rehabilitation. Telemedicine Journal and E-Health, 2018, 24, 1014-1020.	1.6	14
40	Using Smart City Technology to Make Healthcare Smarter. Proceedings of the IEEE, 2018, 106, 708-722.	16.4	120
41	Automatic assessment of functional health decline in older adults based on smart home data. Journal of Biomedical Informatics, 2018, 81, 119-130.	2.5	62
42	Indoor air quality and wildfire smoke impacts in the Pacific Northwest. Science and Technology for the Built Environment, 2018, 24, 149-159.	0.8	15
43	Using smart offices to predict occupational stress. International Journal of Industrial Ergonomics, 2018, 67, 13-26.	1.5	31
44	Activity Recognition Using Graphical Features from Smart Phone Sensor. Lecture Notes in Computer Science, 2018, , 45-55.	1.0	1
45	Forecasting behavior in smart homes based on sleep and wake patterns. Technology and Health Care, 2017, 25, 89-110.	0.5	24
46	Smart secure homes: a survey of smart home technologies that sense, assess, and respond to security threats. Journal of Reliable Intelligent Environments, 2017, 3, 83-98.	3.8	30
47	Using change point detection to automate daily activity segmentation. , 2017, , .		24
48	Using wrist-worn sensors to measure and compare physical activity changes for patients undergoing rehabilitation. , 2017, , .		9
49	An analysis of a digital variant of the Trail Making Test using machine learning techniques. Technology and Health Care, 2017, 25, 251-264.	0.5	36
50	Learning Activity Predictors from Sensor Data: Algorithms, Evaluation, and Applications. IEEE Transactions on Knowledge and Data Engineering, 2017, 29, 2744-2757.	4.0	39
51	Mobile sensing to improve medication adherence. , 2017, , .		10
52	Collegial activity learning between heterogeneous sensors. Knowledge and Information Systems, 2017, 53, 337-364.	2.1	31
53	Guest EditorialSpecial Issue on Situation, Activity, and Goal Awareness in Cyber-Physical Humanâ€"Machine Systems. IEEE Transactions on Human-Machine Systems, 2017, 47, 305-309.	2.5	12
54	Measuring changes in gait and vehicle transfer ability during inpatient rehabilitation with wearable inertial sensors. , 2017, 2017, .		5

#	Article	IF	Citations
55	A survey of methods for time series change point detection. Knowledge and Information Systems, 2017, 51, 339-367.	2.1	663
56	Multicomponent analysis of a digital Trail Making Test. Clinical Neuropsychologist, 2017, 31, 154-167.	1.5	71
57	Thyme: Improving Smartphone Prompt Timing Through Activity Awareness. , 2017, , .		5
58	Analyzing the Relationship between Human Behavior and Indoor Air Quality. Journal of Sensor and Actuator Networks, 2017, 6, 13.	2.3	39
59	Activity Learning as a Foundation for Security Monitoring in Smart Homes. Sensors, 2017, 17, 737.	2.1	38
60	Analyzing Sensor-Based Time Series Data to Track Changes in Physical Activity during Inpatient Rehabilitation. Sensors, 2017, 17, 2219.	2.1	23
61	Monitoring Everyday Abilities and Cognitive Health Using Pervasive Technologies: Current State and Prospect. , 2017, , 365-385.		1
62	How Accurate Is Your Activity Tracker? A Comparative Study of Step Counts in Low-Intensity Physical Activities. JMIR MHealth and UHealth, 2017, 5, e106.	1.8	63
63	Activity-Aware Energy-Efficient Automation of Smart Buildings. Energies, 2016, 9, 624.	1.6	26
64	Designing Wearable Sensor-Based Analytics for Quantitative Mobility Assessment. , 2016, , .		4
65	Detecting Health and Behavior Change by Analyzing Smart Home Sensor Data. , 2016, , .		33
66	Quantitative assessment of lower limb and cane movement with wearable inertial sensors. , 2016, , .		14
67	Unsupervised detection and analysis of changes in everyday physical activity data. Journal of Biomedical Informatics, 2016, 63, 54-65.	2.5	41
68	Using Smart Homes to Detect and Analyze Health Events. Computer, 2016, 49, 29-37.	1.2	52
69	Ambient intelligence for health environments. Journal of Biomedical Informatics, 2016, 64, 207-210.	2.5	30
70	Smart home in a box: usability study for a large scale self-installation of smart home technologies. Journal of Reliable Intelligent Environments, 2016, 2, 93-106.	3.8	44
71	One-Class Classification-Based Real-Time Activity Error Detection in Smart Homes. IEEE Journal on Selected Topics in Signal Processing, 2016, 10, 914-923.	7.3	52
72	Ambient and smartphone sensor assisted ADL recognition in multi-inhabitant smart environments. Journal of Ambient Intelligence and Humanized Computing, 2016, 7, 1-19.	3.3	99

#	ARTICLE	IF	CITATIONS
73	Modeling patterns of activities using activity curves. Pervasive and Mobile Computing, 2016, 28, 51-68.	2.1	46
74	Subjective cognitive complaints and objective memory performance influence prompt preference for instrumental activities of daily living. Gerontechnology, 2016, 14, 169-176.	0.0	6
75	Prompting technologies: A comparison of time-based and context-aware transition-based prompting. Technology and Health Care, 2015, 23, 745-756.	0.5	13
76	Automated Detection of Activity Transitions for Prompting. IEEE Transactions on Human-Machine Systems, 2015, 45, 575-585.	2.5	46
77	Transfer Learning across Feature-Rich Heterogeneous Feature Spaces via Feature-Space Remapping (FSR). ACM Transactions on Intelligent Systems and Technology, 2015, 6, 1-27.	2.9	58
78	Predicting Functional Independence Measure Scores During Rehabilitation With Wearable Inertial Sensors. IEEE Access, 2015, 3, 1350-1366.	2.6	21
79	Analyzing Activity Behavior and Movement in a Naturalistic Environment Using Smart Home Techniques. IEEE Journal of Biomedical and Health Informatics, 2015, 19, 1882-1892.	3.9	153
80	Toward Automating Clinical Assessments: A Survey of the Timed Up and Go. IEEE Reviews in Biomedical Engineering, 2015, 8, 64-77.	13.1	124
81	RACOG and wRACOG: Two Probabilistic Oversampling Techniques. IEEE Transactions on Knowledge and Data Engineering, 2015, 27, 222-234.	4.0	94
82	CRAFFT: an activity prediction model based on Bayesian networks. Journal of Ambient Intelligence and Humanized Computing, 2015, 6, 193-205.	3.3	50
83	Activity recognition on streaming sensor data. Pervasive and Mobile Computing, 2014, 10, 138-154.	2.1	404
84	Special Issue on Ambient Interaction. International Journal of Human-Computer Interaction, 2014, 30, 753-754.	3.3	1
85	Monitoring Everyday Abilities and Cognitive Health Using Pervasive Technologies: Current State and Prospect. , 2014, , 1-18.		0
86	Transfer learning for activity recognition: a survey. Knowledge and Information Systems, 2013, 36, 537-556.	2.1	328
87	CASAS: A Smart Home in a Box. Computer, 2013, 46, 62-69.	1.2	494
88	Automated Cognitive Health Assessment Using Smart Home Monitoring of Complex Tasks. IEEE Transactions on Systems, Man, and Cybernetics: Systems, 2013, 43, 1302-1313.	5.9	147
89	Handling Class Overlap and Imbalance to Detect Prompt Situations in Smart Homes. , 2013, , .		25
90	Infrastructure-assisted smartphone-based ADL recognition in multi-inhabitant smart environments. , 2013, , .		38

#	Article	IF	Citations
91	A Survey on Ambient Intelligence in Healthcare. Proceedings of the IEEE, 2013, 101, 2470-2494.	16.4	512
92	Activity Discovery and Activity Recognition: A New Partnership. IEEE Transactions on Cybernetics, 2013, 43, 820-828.	6.2	190
93	Automated assessment of cognitive health using smart home technologies. Technology and Health Care, 2013, 21, 323-343.	0.5	84
94	Naturalistic Assessment of Everyday Activities and Prompting Technologies in Mild Cognitive Impairment. Journal of the International Neuropsychological Society, 2013, 19, 442-452.	1.2	69
95	wRACOG: A Gibbs Sampling-Based Oversampling Technique. , 2013, , .		8
96	Learning a taxonomy of predefined and discovered activity patterns. Journal of Ambient Intelligence and Smart Environments, 2013, 5, 621-637.	0.8	13
97	Behaviometrics for Identifying Smart Home Residents. Atlantis Ambient and Pervasive Intelligence, 2013, , 55-71.	0.2	9
98	Application of Cognitive Rehabilitation Theory to the Development of Smart Prompting Technologies. IEEE Reviews in Biomedical Engineering, 2012, 5, 29-44.	13.1	67
99	PUCK: an automated prompting system for smart environments: toward achieving automated prompting—challenges involved. Personal and Ubiquitous Computing, 2012, 16, 859-873.	1.9	28
100	FindingHuMo: Real-Time Tracking of Motion Trajectories from Anonymous Binary Sensing in Smart Environments. , 2012, , .		34
101	Behavior-Based Home Energy Prediction. , 2012, , .		22
102	Using smart phones for context-aware prompting in smart environments. , 2012, , .		19
103	Learning Setting-Generalized Activity Models for Smart Spaces. IEEE Intelligent Systems, 2012, 27, 32-38.	4.0	272
104	Context-aware prompting from your smart phone. , 2012, , .		4
105	Pervasive computing at scale: Transforming the state of the art. Pervasive and Mobile Computing, 2012, 8, 22-35.	2.1	96
106	A Study of the Relationship between Weather Variables and Electric Power Demand inside a Smart Grid/Smart World Framework. Sensors, 2012, 12, 11571-11591.	2.1	139
107	Gerontechnology Education: Beyond the Barriers. IEEE Pervasive Computing, 2011, 10, 59-63.	1.1	1
108	Discovering Activities to Recognize and Track in a Smart Environment. IEEE Transactions on Knowledge and Data Engineering, 2011, 23, 527-539.	4.0	379

#	ARTICLE	IF	CITATIONS
109	Sensor selection to support practical use of health‑monitoring smart environments. Wiley Interdisciplinary Reviews: Data Mining and Knowledge Discovery, 2011, 1, 339-351.	4.6	38
110	Activity knowledge transfer in smart environments. Pervasive and Mobile Computing, 2011, 7, 331-343.	2.1	48
111	Cognitive Correlates of Functional Performance in Older Adults: Comparison of Self-Report, Direct Observation, and Performance-Based Measures. Journal of the International Neuropsychological Society, 2011, 17, 853-864.	1.2	129
112	Recognizing independent and joint activities among multiple residents in smart environments. Journal of Ambient Intelligence and Humanized Computing, 2010, 1, 57-63.	3.3	213
113	DETECTION OF SOCIAL INTERACTION IN SMART SPACES. Cybernetics and Systems, 2010, 41, 90-104.	1.6	50
114	A fuzzy based verification agent for the Persim human activity simulator in Ambient Intelligent Environments. , 2010, , .		7
115	Designing Lightweight Software Architectures for Smart Environments. , 2010, , .		8
116	A Data Mining Framework for Activity Recognition in Smart Environments. , 2010, , .		42
117	Using a Hidden Markov Model for Resident Identification. , 2010, , .		34
118	Automated Prompting in a Smart Home Environment. , 2010, , .		10
119	Discovering Temporal Features and Relations of Activity Patterns. , 2010, , .		29
120	Assessing the Quality of Activities in a Smart Environment. Methods of Information in Medicine, 2009, 48, 480-485.	0.7	349
121	Keeping the Resident in the Loop: Adapting the Smart Home to the User. IEEE Transactions on Systems, Man and Cybernetics, Part A: Systems and Humans, 2009, 39, 949-959.	3.4	326
122	Ambient intelligence and wearable computing: Sensors on the body, in the home, and beyond. Journal of Ambient Intelligence and Smart Environments, 2009, 1, 83-86.	0.8	31
123	An information theoretic approach for the discovery of irregular and repetitive patterns in genomic data. , 2008, , .		0
124	Temporal and structural analysis of biological networks in combination with microarray data. , 2008, , .		1
125	Graph-Based Data Mining in Dynamic Networks: Empirical Comparison of Compression-Based and Frequency-Based Subgraph Mining. , 2008, , .		14
126	Automatic Video Classification: A Survey of the Literature. IEEE Transactions on Systems, Man and Cybernetics, Part C: Applications and Reviews, 2008, 38, 416-430.	3.3	214

#	Article	IF	Citations
127	The Integraton of Graph-Based Knowledge Discovery with Image Segmentation Hierarchies for Data Analysis, Data Mining and Knowledge Discovery. , 2008, , .		3
128	Graph-Based Analysis of Human Transfer Learning Using a Game Testbed. IEEE Transactions on Knowledge and Data Engineering, 2007, 19, 1465-1478.	4.0	12
129	Data Mining for Hierarchical Model Creation. IEEE Transactions on Systems, Man and Cybernetics, Part C: Applications and Reviews, 2007, 37, 561-572.	3.3	96
130	Generating social networks of intimate contacts for the study of public health intervention strategies. , 2007, , .		1
131	Prediction Models for a Smart Home Based Health Care System. , 2007, , .		18
132	How smart are our environments? An updated look at the state of the art. Pervasive and Mobile Computing, 2007, 3, 53-73.	2.1	509
133	Application of Graph-based Data Mining to Metabolic Pathways. , 2006, , .		17
134	Discovery of Frequent Substructures. , 2006, , 97-115.		7
135	Some Links between Formal Concept Analysis and Graph Mining. , 2006, , 227-252.		3
136	Kernel Methods for Graphs. , 2006, , 253-282.		5
137	Kernels as Link Analysis Measures. , 2006, , 283-310.		1
138	Entity Resolution in Graphs. , 2006, , 311-344.		41
139	Mining from Chemical Graphs. , 2006, , 345-379.		0
140	Unified Approach to Rooted Tree Mining: Algorithms and Applications. , 2006, , 381-410.		0
141	Dense Subgraph Extraction. , 2006, , 411-441.		2
142	Graph Matching-Exact and Error-Tolerant Methods and the Automatic Learning of Edit Costs. , 2006, , 15-34.		2
143	Graph Visualization and Data Mining. , 2006, , 35-63.		8
144	Graph Patterns and the R-Mat Generator. , 2006, , 65-95.		2

#	ARTICLE	IF	CITATIONS
145	Finding Topological Frequent Patterns from Graph Datasets. , 2006, , 117-158.		1
146	Unsupervised and Supervised Pattern Learning in Graph Data. , 2006, , 159-181.		3
147	Graph Grammar Learning. , 2006, , 183-201.		1
148	Constructing Decision Tree Based on Chunkingless Graph-Based Induction. , 2006, , 203-226.		0