Kumar Yelamarthi

List of Publications by Year
in descending order

89 papers	1,074 citations	840776 11 h-index	677142 22 g-index
89 all docs	89 docs citations	89 times ranked	990 citing authors

#	Article	IF	Citations
1	Privacyâ€preserving cooperative localization in vehicular edge computing infrastructure. Concurrency Computation Practice and Experience, 2022, 34, e5827.	2.2	5
2	Decision tree based user-centric security solution for critical IoT infrastructure. Computers and Electrical Engineering, 2022, 99, 107754.	4.8	13
3	Comprehensive Performance Analysis of Zigbee Communication: An Experimental Approach with XBee S2C Module. Sensors, 2022, 22, 3245.	3.8	9
4	Integration of Internet of Things and blockchain toward portability and lowâ€energy consumption. Transactions on Emerging Telecommunications Technologies, 2021, 32, e4103.	3.9	13
5	AI-Enabled Fingerprinting and Crowdsource-Based Vehicle Localization for Resilient and Safe Transportation Systems. IEEE Transactions on Intelligent Transportation Systems, 2021, 22, 4660-4669.	8.0	10
6	Packet Drop and RSSI Evaluation for LoRa: An Indoor Application Perspective. , 2021, , .		8
7	Performance Analysis of Ring Oscillator PUF for Robust Security in Smart Transportation. , 2021, , .		4
8	D2D-LoRa Latency Analysis: An Indoor Application Perspective. , 2021, , .		1
9	Crop Yield Analysis Using Machine Learning Algorithms. , 2020, , .		21
10	Crop Yield Prediction Using Deep Neural Network. , 2020, , .		18
11	An IoT Based Efficient Waste Collection System with Smart Bins. , 2020, , .		24
12	Proof-of-Authentication Consensus Algorithm: Blockchain-based IoT Implementation. , 2020, , .		16
13	LoRa Architecture for V2X Communication: An Experimental Evaluation with Vehicles on the Move. Sensors, 2020, 20, 6876.	3.8	26
14	Physical Unclonable Function Based Hardware Security for Resource Constraint IoT Devices. , 2020, , .		2
15	An Energy-Efficient and Reliable RPL for IoT. , 2020, , .		9
16	Butterworth Filter Application for Structural Health Monitoring. , 2020, , 733-748.		0
17	Securing a Vehicle Fleet Management Through Blockchain and Internet of Things. , 2020, , .		1
18	A LoRa Based Reliable and Low Power Vehicle to Everything (V2X) Communication Architecture. , 2020, , .		5

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19	Performance Evaluation of IoT Encryption Algorithms: Memory, Timing, and Energy. , 2019, , .		18
20	IoT Based Express-Lanes for Autonomous Vehicle. , 2019, , .		0
21	An optimization framework for dynamic pipeline management in computing systems. Computers and Electrical Engineering, 2019, 78, 242-258.	4.8	1
22	Rapidly Deployable IoT Architecture with Data Security: Implementation and Experimental Evaluation. Sensors, 2019, 19, 2484.	3.8	20
23	An Artificial Sweating System for Sweat Sensor Testing Applications. Electronics (Switzerland), 2019, 8, 606.	3.1	6
24	Lab in a Box : A Rapidly Deployable Environmental Monitoring IoT System. , 2019, , .		3
25	Connected Vehicle. , 2019, , .		0
26	Wearable Sweat Sensors: Background and Current Trends. Electroanalysis, 2019, 31, 411-421.	2.9	67
27	A Perceptual Computing Based Gesture Controlled Quadcopter for Visual Tracking and Transportation. , 2019, , 131-141.		0
28	How Does Encryption Influence Timing in IoT?. , 2018, , .		7
29	Improved RPL for IoT Applications. , 2018, , .		7
30	Smart Car: An IoT Based Accident Detection System. , 2018, , .		39
31	A Custom Computer-Controlled Fluid Mixing and Dispensing System for Sweat Sensor Testing Applications. , 2018, , .		0
32	A complete Internet of Things (IoT) platform for Structural Health Monitoring (SHM). , 2018, , .		49
33	A Real-Time Wireless Sweat Rate Measurement System for Physical Activity Monitoring. Sensors, 2018, 18, 533.	3.8	36
34	Sensing and classifying indoor environments: An Iot based portable tour guide system. , 2017, , .		6
35	Tracking a system of multiple cameras on a rotating spherical robot. , 2017, , .		0
36	Continuous heart rate monitoring using smartphone. , 2017, , .		8

#	Article	IF	Citations
37	IoT-Based Health Monitoring System for Active and Assisted Living. Lecture Notes of the Institute for Computer Sciences, Social-Informatics and Telecommunications Engineering, 2017, , 11-20.	0.3	25
38	Design and Analysis of a Four-Pendulum Omnidirectional Spherical Robot. Journal of Intelligent and Robotic Systems: Theory and Applications, 2017, 86, 3-15.	3.4	19
39	A comparative analysis of simulation and experimental results on RPL performance. , 2017, , .		5
40	Rapid deployment of IoT enabled system for automobile fuel range and gas price location. , 2017, , .		8
41	Signal processing techniques for IoT-based structural health monitoring. , 2017, , .		9
42	The design and implementation of a smart parking meter for Internet of Vehicle (IoV). , 2017, , .		1
43	Energy efficient routing for Internet of Things (IoT) applications. , 2017, , .		16
44	Internet-enabled house pipe temperature monitoring system. , 2017, , .		0
45	Design of a smartphone operated powerstrip. , 2017, , .		2
46	Internet of Things (IoT) Platform for Structure Health Monitoring. Wireless Communications and Mobile Computing, 2017, 2017, 1-10.	1.2	94
47	An Application-Driven Modular IoT Architecture. Wireless Communications and Mobile Computing, 2017, 2017, 1-16.	1.2	54
48	A Smart Wearable Navigation System for Visually Impaired. Lecture Notes of the Institute for Computer Sciences, Social-Informatics and Telecommunications Engineering, 2017, , 333-341.	0.3	9
49	Source Code Vulnerabilities in IoT Software Systems. Advances in Science, Technology and Engineering Systems, 2017, 2, 1502-1507.	0.5	10
50	Butterworth Filter Application for Structural Health Monitoring. International Journal of Handheld Computing Research, 2016, 7, 15-29.	0.4	10
51	Virtual reality navigation simulation for users who are blind. , 2016, , .		1
52	Structural health monitoring: Internet of things application. , 2016, , .		22
53	A four-layer wireless sensor network framework for IoT applications. , 2016, , .		7
54	Parallelization in software systems used in wireless sensor networks and Internet of Things: Case study: Middleware systems. , 2016, , .		0

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55	Vulnerable C/C++ code usage in IoT software systems. , 2016, , .		8
56	A wearable portable electronic travel aid for blind. , 2016, , .		22
57	On the evolution of mobile computing software systems and C/C++ vulnerable code: Empirical investigation. , 2016, , .		3
58	An FPGA-based portable real-time obstacle detection and notification system. , 2016, , .		1
59	Reliability evaluation of iBeacon for micro-localization. , 2016, , .		13
60	Structure damage localization using a reliable wave damage detection technique. , 2016, , .		6
61	Kalman filter based indoor mobile robot navigation. , 2016, , .		6
62	A low-power IoT framework: From sensors to the cloud. , 2016, , .		15
63	Toward integrating Structural Health Monitoring with Internet of Things (IoT). , 2016, , .		22
64	A sensor fusion methodology for obstacle avoidance robot. , 2016, , .		9
65	A Four-Pendulum Omnidirectional Spherical Robot: Design Analysis and Comparison. , 2015, , .		0
66	A Flipped First-Year Digital Circuits Course for Engineering and Technology Students. IEEE Transactions on Education, 2015, 58, 179-186.	2.4	44
67	Navigation assistive system for the blind using a portable depth sensor. , 2015, , .		3
68	Performance optimization of dynamic CMOS circuits through transistor sizing. , 2014, , .		1
69	A Kinect based vibrotactile feedback system to assist the visually impaired. , 2014, , .		12
70	Engineering Management In An Interdisciplinary Senior Design Project. Balkan Region Conference on Engineering and Business Education, 2014, 1, 153-156.	0.0	0
71	RFID positioning robot: An indoor navigation system. , 2013, , .		22
72	Target localization in Wireless Sensor Network based on Time Difference of Arrival. , 2013, , .		9

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73	Timing-Driven Variation-Aware Partitioning and Optimization of Mixed Static-Dynamic CMOS Circuits. Circuits and Systems, 2013, 04, 202-208.	0.1	1
74	Timing Optimization and Noise Tolerance for Dynamic CMOS Susceptible to Process Variations. IEEE Transactions on Semiconductor Manufacturing, 2012, 25, 255-265.	1.7	8
75	An RFID based autonomous indoor tour guide robot. , 2012, , .		20
76	Drying of Solids in a Batch Fluidized Bed. , 2012, , .		0
77	Delay optimization considering power saving in dynamic CMOS circuits. , 2011, , .		1
78	A timing optimization technique for nanoscale CMOS circuits susceptible to process variations. , 2011, , .		0
79	Dynamic CMOS Load Balancing and Path Oriented in Time Optimization Algorithms to Minimize Delay Uncertainties from Process Variations. VLSI Design, 2010, 2010, 1-13.	0.5	0
80	RFID and GPS integrated navigation system for the visually impaired. , 2010, , .		72
81	Process Variation-Aware Timing Optimization for Dynamic and Mixed-Static-Dynamic CMOS Logic. IEEE Transactions on Semiconductor Manufacturing, 2009, 22, 31-39.	1.7	6
82	A Path Oriented In Time optimization flow for mixed-static-dynamic CMOS logic. , 2008, , .		0
83	Process Variation Aware Timing Optimization through Transistor Sizing in Dynamic CMOS Logic. , 2008, , .		7
84	Process Variation Aware Transistor Sizing for Load Balance of Multiple Paths in Dynamic CMOS for Timing Optimization. Journal of Computers, 2008, 3, .	0.4	3
85	Project Management in an Interdisciplinary Senior Design Team. , 2007, , .		0
86	Transistor Sizing for Load Balance of Multiple Paths in Dynamic CMOS for Timing Optimization. , 2007, , .		4
87	Low-Cost Low-Power Self-Test Design and Verification of On-Chip ADC for System-on-a-Chip Applications. Conference Record - IEEE Instrumentation and Measurement Technology Conference, 2006, , .	0.0	4
88	Low-Cost Low-Power Self-Test Design and Verification of On-Chip ADC for System-on-a-Chip Applications. Conference Record - IEEE Instrumentation and Measurement Technology Conference, 2006, , .	0.0	2
89	An Instructional Design Framework to Improve Student Learning in a First-Year Engineering Class. Journal of Information Technology Education: Innovations in Practice, 0, 15, 195-222.	0.0	6