

Fergal Mc Caffery

List of Publications by Year in descending order

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100
papers

1,006
citations

840119

11
h-index

642321

23
g-index

109
all docs

109
docs citations

109
times ranked

603
citing authors

#	ARTICLE	IF	CITATIONS
1	Hybrid software and system development in practice: waterfall, scrum, and beyond. , 2017, , .		146
2	Creating Software Process Capability/Maturity Models. IEEE Software, 2010, 27, 92-94.	2.1	93
3	A Process Framework for Global Software Engineering Teams. Information and Software Technology, 2012, 54, 1175-1191.	3.0	76
4	The Gamification of SPICE. Communications in Computer and Information Science, 2012, , 295-301.	0.4	50
5	Hybrid Software Development Approaches in Practice: A European Perspective. IEEE Software, 2019, 36, 20-31.	2.1	46
6	Barriers to Adopting Agile Practices When Developing Medical Device Software. Communications in Computer and Information Science, 2012, , 141-147.	0.4	41
7	Global Software Engineering: A Software Process Approach. , 2010, , 35-56.		31
8	Ahaa –agile, hybrid assessment method for automotive, safety critical smes. , 2008, , .		24
9	Medical device standards' requirements for traceability during the software development lifecycle and implementation of a traceability assessment model. Computer Standards and Interfaces, 2013, 36, 3-9.	3.8	24
10	Risk management capability model for the development of medical device software. Software Quality Journal, 2010, 18, 81-107.	1.4	22
11	A risk management capability model for use in medical device companies. , 2006, , .		20
12	The Barriers to Traceability and their Potential Solutions: Towards a Reference Framework. , 2012, , .		20
13	Medical Device Software Traceability. , 2012, , 321-339.		19
14	An agile process model for product derivation in software product line engineering. Journal of Software: Evolution and Process, 2012, 24, 561-571.	1.2	17
15	An Agile Implementation within a Medical Device Software Organisation. Communications in Computer and Information Science, 2014, , 190-201.	0.4	17
16	Balancing Agility and Discipline in a Medical Device Software Organisation. Communications in Computer and Information Science, 2013, , 199-210.	0.4	17
17	Standalone Software as an Active Medical Device. Communications in Computer and Information Science, 2011, , 97-107.	0.4	15
18	Assessing a Hospital's Medical IT Network Risk Management Practice with 80001-1. Biomedical Instrumentation and Technology, 2014, 48, 64-71.	0.2	12

#	ARTICLE	IF	CITATIONS
19	Development and benefits of MDevSPICE [®] , the medical device software process assessment framework. <i>Journal of Software: Evolution and Process</i> , 2016, 28, 800-816.	1.2	12
20	Lightweight SPI assessments: what is the real cost?. <i>Software Process Improvement and Practice</i> , 2009, 14, 271-278.	1.1	11
21	Medi SPICE development. <i>Journal of Software: Evolution and Process</i> , 2010, 22, 255-268.	1.1	11
22	Adopting agile practices when developing software for use in the medical domain. <i>Journal of Software: Evolution and Process</i> , 2014, 26, 504-512.	1.2	11
23	To what extent the medical device software regulations can be achieved with agile software development methods? XP [®] DSDM [®] Scrum. <i>Journal of Supercomputing</i> , 2019, 75, 5227-5260.	2.4	11
24	A lightweight traceability assessment method for medical device software. <i>Journal of Software: Evolution and Process</i> , 2013, 25, 363-372.	1.2	10
25	A roadmap to ISO 14971 implementation. <i>Journal of Software: Evolution and Process</i> , 2015, 27, 319-336.	1.2	10
26	Revising IEC 80001-1: Risk management of health information technology systems. <i>Computer Standards and Interfaces</i> , 2018, 60, 67-72.	3.8	10
27	Improving software Risk Management in a Medical Device Company. , 2009, , .		9
28	Tailoring software process capability/maturity models for the health domain. <i>Health and Technology</i> , 2013, 3, 11-28.	2.1	9
29	Assessing traceability-practical experiences and lessons learned. <i>Journal of Software: Evolution and Process</i> , 2015, 27, 591-601.	1.2	9
30	Agile [®] Is it Suitable for Medical Device Software Development?. <i>Communications in Computer and Information Science</i> , 2016, , 417-422.	0.4	9
31	Proposing an ISO/IEC 15504-2 Compliant Method for Process Capability/Maturity Models Customization. <i>Lecture Notes in Computer Science</i> , 2011, , 44-58.	1.0	9
32	Traceability-Why Do It?. <i>Communications in Computer and Information Science</i> , 2012, , 161-172.	0.4	8
33	A hybrid assessment approach for medical device software development companies. <i>Journal of Software: Evolution and Process</i> , 2018, 30, e1929.	1.2	8
34	A Traceability Process Assessment Model for the Medical Device Domain. <i>Communications in Computer and Information Science</i> , 2014, , 206-216.	0.4	8
35	A Security Argument Pattern for Medical Device Assurance Cases. , 2014, , .		7
36	Piloting MDevSPICE: the medical device software process assessment framework. , 2015, , .		6

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37	Development of MDevSPICE® “ the medical device software process assessment framework. Journal of Software: Evolution and Process, 2015, 27, 565-572.	1.2	6
38	Creation of an IEC 62304 compliant software development plan. Journal of Software: Evolution and Process, 2016, 28, 1005-1010.	1.2	6
39	Situational Factors in Safety Critical Software Development. Communications in Computer and Information Science, 2016, , 132-147.	0.4	6
40	Development of a Process Assessment Model for Assessing Medical IT Networks against IEC 80001-1. Communications in Computer and Information Science, 2012, , 148-160.	0.4	6
41	Research findings from an industrial trial of a traceability assessment and implementation framework. , 2016, , .		5
42	Approach to the development of a Unified Framework for Safety Critical Software Development. Computer Standards and Interfaces, 2017, 54, 152-161.	3.8	5
43	A Methodology for Software Process Improvement Roadmaps for Regulated Domains “ Example with IEC 62366. Communications in Computer and Information Science, 2013, , 25-35.	0.4	5
44	Tailoring MDevSPICE® for mobile medical apps. , 2016, , .		4
45	Analysis of Attacks and Security Requirements for Wireless Body Area Networks - A Systematic Literature Review. Communications in Computer and Information Science, 2019, , 439-452.	0.4	4
46	The Development and Validation of a Traceability Assessment Model. Communications in Computer and Information Science, 2014, , 72-83.	0.4	4
47	Med-Trace. Communications in Computer and Information Science, 2011, , 208-211.	0.4	4
48	Development of the Medi SPICE PRM. Communications in Computer and Information Science, 2012, , 265-268.	0.4	4
49	A proposed way for European software industries to achieve growth within the global marketplace. Software Process Improvement and Practice, 2006, 11, 277-285.	1.1	3
50	Changes to the International Regulatory Environment. Journal of Medical Devices, Transactions of the ASME, 2012, 6, .	0.4	3
51	The MedITNet assessment framework: development and validation of a framework for improving risk management of medical IT networks. Journal of Software: Evolution and Process, 2016, 28, 817-834.	1.2	3
52	Risk Management: Achieving Higher Maturity & Capability Levels through the LEGO Approach. , 2016, , .		3
53	Mobile medical app development with a focus on traceability. Journal of Software: Evolution and Process, 2017, 29, e1861.	1.2	3
54	Agile Usage in Embedded Software Development in Safety Critical Domain“A Systematic Review. Communications in Computer and Information Science, 2018, , 316-326.	0.4	3

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55	A Lightweight Assessment Method for Medical Device Software Processes. Communications in Computer and Information Science, 2014, , 144-156.	0.4	3
56	A Critical Evaluation of a Methodology for the Generation of Software Process Improvement Roadmaps. Communications in Computer and Information Science, 2014, , 36-47.	0.4	3
57	Risk management of medical IT networks: an ISO/IEC 15504 compliant approach to assessment against IEC 80001-1. , 2013, , .		3
58	A Serverless Architecture for Wireless Body Area Network Applications. Lecture Notes in Computer Science, 2019, , 239-254.	1.0	3
59	A Developer Driven Framework for Security and Privacy in the Internet of Medical Things. Communications in Computer and Information Science, 2020, , 107-119.	0.4	3
60	Developing acceptance tests from existing documentation using annotations: An experiment. , 2009, , .		2
61	The Development and Validation of a Roadmap for Traceability. Communications in Computer and Information Science, 2015, , 45-57.	0.4	2
62	Development and validation of the MedITNet assessment framework: improving risk management of medical IT networks. , 2015, , .		2
63	A Process Framework Combining Safety and Security in Practice. Communications in Computer and Information Science, 2018, , 173-180.	0.4	2
64	Taxonomy-based testing and validation of a new defect classification for health software. Journal of Software: Evolution and Process, 2019, 31, e1985.	1.2	2
65	Evaluation of a Dependability Mechanism for Cyber Physical Systems. Communications in Computer and Information Science, 2019, , 427-438.	0.4	2
66	MDevSPICE - A Comprehensive Solution for Manufacturers and Assessors of Safety-Critical Medical Device Software. Communications in Computer and Information Science, 2014, , 274-278.	0.4	2
67	Software Process Improvement and Roadmapping â€“ A Roadmap for Implementing IEC 62304 in Organizations Developing and Maintaining Medical Device Software. Communications in Computer and Information Science, 2015, , 19-30.	0.4	2
68	Towards an International Security Case Framework for Networked Medical Devices. Lecture Notes in Computer Science, 2015, , 197-209.	1.0	2
69	How Does Scrum Conform to the Regulatory Requirements Defined in MDevSPICEÂ®?. Communications in Computer and Information Science, 2017, , 257-268.	0.4	2
70	The Approach to the Development of an Assessment Method for IEC 80001-1. Communications in Computer and Information Science, 2013, , 37-48.	0.4	2
71	MeD UD â€“ A Process Reference Model for Usability Design in Medical Devices. Lecture Notes in Computer Science, 2013, , 224-239.	1.0	2
72	Improving Safety in Medical Devices from Concept to Retirement. , 2013, , 453-480.		2

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73	Framework to Assist Healthcare Delivery Organisations and Medical Device Manufacturers Establish Security Assurance for Networked Medical Devices. Communications in Computer and Information Science, 2013, , 313-322.	0.4	2
74	Investigation of Traceability within a Medical Device Organization. Communications in Computer and Information Science, 2013, , 211-222.	0.4	2
75	Automotive-adept: A lightweight assessment method for the automotive software industry. Software Process Improvement and Practice, 2008, 13, 345-353.	1.1	1
76	Improving Communication in Risk Management of Health Information Technology Systems by means of Medical Text Simplification. , 2019, , .		1
77	Quality improvement mechanism for cyber physical systemsâ€”An evaluation. Journal of Software: Evolution and Process, 2020, 32, e2295.	1.2	1
78	Safety Critical Software Development â€” Extending Quality Management System Practices to Achieve Compliance with Regulatory Requirements. Communications in Computer and Information Science, 2016, , 17-30.	0.4	1
79	Software Process Improvement Roadmaps â€” Using Design Patterns to Aid SMEâ€™s Developing Medical Device Software in the Implementation of IEC 62304. Communications in Computer and Information Science, 2016, , 43-56.	0.4	1
80	Intelligent Voice Navigation of Spreadsheets. Lecture Notes in Computer Science, 2008, , 577-584.	1.0	1
81	A Security Assurance Framework for Networked Medical Devices. Lecture Notes in Computer Science, 2013, , 363-366.	1.0	1
82	Automating Expert-Defined Tests: A Suitable Approach for the Medical Device Industry?. Communications in Computer and Information Science, 2009, , 32-43.	0.4	1
83	The Development and Current Status of Medi SPICE. Communications in Computer and Information Science, 2013, , 49-60.	0.4	1
84	Improving Estimates by Hybridizing CMMI and Requirement Engineering Maturity Models â€” A LEGO Application. Communications in Computer and Information Science, 2013, , 127-139.	0.4	1
85	A Lightweight Software Process Assessment Approach Based on MDevSPICEÂ® for Medical Device Development Domain. Communications in Computer and Information Science, 2017, , 578-588.	0.4	1
86	Improving Multi-domain Stakeholder Communication of Embedded Safety-critical Development using Agile Practices: Expert Review. , 2020, , .		1
87	Developer Driven Framework for Security and Privacy in the IoMT. , 2020, , .		1
88	Mapping Medical Device Standards Against the CMMI for Configuration Management. Communications in Computer and Information Science, 2008, , 153-164.	0.4	1
89	AnnoTestWeb/Run: Annotations Based Acceptance Testing. Lecture Notes in Business Information Processing, 2010, , 381-382.	0.8	0
90	Spreadsheet Information Retrieval through Natural Language. Lecture Notes in Computer Science, 2010, , 297-298.	1.0	0

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91	Verification & Validation in Medi SPICE. Communications in Computer and Information Science, 2011, , 73-83.	0.4	0
92	Challenges for Requirements Development: An Industry Perspective. Communications in Computer and Information Science, 2011, , 217-220.	0.4	0
93	FIRST: Common-Sense Process Scopes for Starting a Process Improvement Program. Communications in Computer and Information Science, 2012, , 186-197.	0.4	0
94	Software or Service? That's the Question!. Lecture Notes in Business Information Processing, 2015, , 30-45.	0.8	0
95	Adopting Agile in the Sports Domain: A Phased Approach. Communications in Computer and Information Science, 2018, , 275-288.	0.4	0
96	A Framework for Taxonomy Based Testing Using Classification of Defects in Health Software-SW91. Communications in Computer and Information Science, 2019, , 606-618.	0.4	0
97	Development of Health Software using Behaviour Driven Development - BDD. , 2020, , .		0
98	A Retrospective Study of Taxonomy based Testing using Empirical Data from a Medical Device Software Company. , 2020, , .		0
99	Introducing Agility into Plan-Based Assessments. Advances in Computer and Electrical Engineering Book Series, 0, , 281-314.	0.2	0
100	Improving Software Risk Management Practices in a Medical Device Company. , 2008, , 24-35.		0