

# Fergal Mc Caffery

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/2796902/publications.pdf>

Version: 2024-02-01

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	Quality improvement mechanism for cyber physical systemsâ€™ An evaluation. Journal of Software: Evolution and Process, 2020, 32, e2295.	1.2	1
2	Development of Health Software using Behaviour Driven Development - BDD. , 2020, , .		0
3	Improving Multi-domain Stakeholder Communication of Embedded Safety-critical Development using Agile Practices: Expert Review. , 2020, , .		1
4	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
5	Developer Driven Framework for Security and Privacy in the IoMT. , 2020, , .		1
6	A Retrospective Study of Taxonomy based Testing using Empirical Data from a Medical Device Software Company. , 2020, , .		0
7	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
8	To what extent the medical device software regulations can be achieved with agile software development methods? XPâ€™DSDMâ€™Scrum. Journal of Supercomputing, 2019, 75, 5227-5260.	2.4	11
9	Improving Communication in Risk Management of Health Information Technology Systems by means of Medical Text Simplification. , 2019, , .		1
10	Hybrid Software Development Approaches in Practice: A European Perspective. IEEE Software, 2019, 36, 20-31.	2.1	46
11	Evaluation of a Dependability Mechanism for Cyber Physical Systems. Communications in Computer and Information Science, 2019, , 427-438.	0.4	2
12	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
13	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
14	A Serverless Architecture for Wireless Body Area Network Applications. Lecture Notes in Computer Science, 2019, , 239-254.	1.0	3
15	A hybrid assessment approach for medical device software development companies. Journal of Software: Evolution and Process, 2018, 30, e1929.	1.2	8
16	Agile Usage in Embedded Software Development in Safety Critical Domainâ€™A Systematic Review. Communications in Computer and Information Science, 2018, , 316-326.	0.4	3
17	A Process Framework Combining Safety and Security in Practice. Communications in Computer and Information Science, 2018, , 173-180.	0.4	2
18	Revising IEC 80001-1: Risk management of health information technology systems. Computer Standards and Interfaces, 2018, 60, 67-72.	3.8	10

#	ARTICLE	IF	CITATIONS
19	Adopting Agile in the Sports Domain: A Phased Approach. Communications in Computer and Information Science, 2018, , 275-288.	0.4	0
20	Approach to the development of a Unified Framework for Safety Critical Software Development. Computer Standards and Interfaces, 2017, 54, 152-161.	3.8	5
21	Mobile medical app development with a focus on traceability. Journal of Software: Evolution and Process, 2017, 29, e1861.	1.2	3
22	Hybrid software and system development in practice: waterfall, scrum, and beyond. , 2017, , .		146
23	How Does Scrum Conform to the Regulatory Requirements Defined in MDevSPICE®?. Communications in Computer and Information Science, 2017, , 257-268.	0.4	2
24	A Lightweight Software Process Assessment Approach Based on MDevSPICE® for Medical Device Development Domain. Communications in Computer and Information Science, 2017, , 578-588.	0.4	1
25	Development and benefits of MDevSPICE®, the medical device software process assessment framework. Journal of Software: Evolution and Process, 2016, 28, 800-816.	1.2	12
26	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
27	Creation of an IEC 62304 compliant software development plan. Journal of Software: Evolution and Process, 2016, 28, 1005-1010.	1.2	6
28	Tailoring MDevSPICE® for mobile medical apps. , 2016, , .		4
29	Risk Management: Achieving Higher Maturity & Capability Levels through the LEGO Approach. , 2016, , .		3
30	Research findings from an industrial trial of a traceability assessment and implementation framework. , 2016, , .		5
31	Agile “ Is it Suitable for Medical Device Software Development?. Communications in Computer and Information Science, 2016, , 417-422.	0.4	9
32	Safety Critical Software Development “ Extending Quality Management System Practices to Achieve Compliance with Regulatory Requirements. Communications in Computer and Information Science, 2016, , 17-30.	0.4	1
33	Software Process Improvement Roadmaps “ Using Design Patterns to Aid SMEs’ Developing Medical Device Software in the Implementation of IEC 62304. Communications in Computer and Information Science, 2016, , 43-56.	0.4	1
34	Situational Factors in Safety Critical Software Development. Communications in Computer and Information Science, 2016, , 132-147.	0.4	6
35	Piloting MDevSPICE: the medical device software process assessment framework. , 2015, , .		6
36	A roadmap to ISO 14971 implementation. Journal of Software: Evolution and Process, 2015, 27, 319-336.	1.2	10

#	ARTICLE	IF	CITATIONS
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	Assessing traceability-practical experiences and lessons learned. Journal of Software: Evolution and Process, 2015, 27, 591-601.	1.2	9
39	The Development and Validation of a Roadmap for Traceability. Communications in Computer and Information Science, 2015, , 45-57.	0.4	2
40	Development and validation of the MedITNet assessment framework: improving risk management of medical IT networks. , 2015, , .		2
41	Software Process Improvement and Roadmapping – 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
42	Towards an International Security Case Framework for Networked Medical Devices. Lecture Notes in Computer Science, 2015, , 197-209.	1.0	2
43	Software or Service? That’s the Question!. Lecture Notes in Business Information Processing, 2015, , 30-45.	0.8	0
44	Adopting agile practices when developing software for use in the medical domain. Journal of Software: Evolution and Process, 2014, 26, 504-512.	1.2	11
45	A Security Argument Pattern for Medical Device Assurance Cases. , 2014, , .		7
46	An Agile Implementation within a Medical Device Software Organisation. Communications in Computer and Information Science, 2014, , 190-201.	0.4	17
47	Assessing a Hospital's Medical IT Network Risk Management Practice with 80001-1. Biomedical Instrumentation and Technology, 2014, 48, 64-71.	0.2	12
48	A Lightweight Assessment Method for Medical Device Software Processes. Communications in Computer and Information Science, 2014, , 144-156.	0.4	3
49	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
50	The Development and Validation of a Traceability Assessment Model. Communications in Computer and Information Science, 2014, , 72-83.	0.4	4
51	A Traceability Process Assessment Model for the Medical Device Domain. Communications in Computer and Information Science, 2014, , 206-216.	0.4	8
52	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
53	Tailoring software process capability/maturity models for the health domain. Health and Technology, 2013, 3, 11-28.	2.1	9
54	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

#	ARTICLE	IF	CITATIONS
55	A lightweight traceability assessment method for medical device software. Journal of Software: Evolution and Process, 2013, 25, 363-372.	1.2	10
56	Balancing Agility and Discipline in a Medical Device Software Organisation. Communications in Computer and Information Science, 2013, , 199-210.	0.4	17
57	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
58	MeD UD â€“ A Process Reference Model for Usability Design in Medical Devices. Lecture Notes in Computer Science, 2013, , 224-239.	1.0	2
59	A Methodology for Software Process Improvement Roadmaps for Regulated Domains â€“ Example with IEC 62366. Communications in Computer and Information Science, 2013, , 25-35.	0.4	5
60	A Security Assurance Framework for Networked Medical Devices. Lecture Notes in Computer Science, 2013, , 363-366.	1.0	1
61	Risk management of medical IT networks: an ISO/IEC 15504 compliant approach to assessment against IEC 80001-1. , 2013, , .		3
62	The Development and Current Status of Medi SPICE. Communications in Computer and Information Science, 2013, , 49-60.	0.4	1
63	Improving Safety in Medical Devices from Concept to Retirement. , 2013, , 453-480.		2
64	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
65	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
66	Investigation of Traceability within a Medical Device Organization. Communications in Computer and Information Science, 2013, , 211-222.	0.4	2
67	Traceability-Why Do It?. Communications in Computer and Information Science, 2012, , 161-172.	0.4	8
68	A Process Framework for Global Software Engineering Teams. Information and Software Technology, 2012, 54, 1175-1191.	3.0	76
69	Barriers to Adopting Agile Practices When Developing Medical Device Software. Communications in Computer and Information Science, 2012, , 141-147.	0.4	41
70	The Barriers to Traceability and their Potential Solutions: Towards a Reference Framework. , 2012, , .		20
71	Changes to the International Regulatory Environment. Journal of Medical Devices, Transactions of the ASME, 2012, 6, .	0.4	3
72	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

#	ARTICLE	IF	CITATIONS
73	Medical Device Software Traceability. , 2012, , 321-339.		19
74	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
75	Development of the Medi SPICE PRM. Communications in Computer and Information Science, 2012, , 265-268.	0.4	4
76	The Gamification of SPICE. Communications in Computer and Information Science, 2012, , 295-301.	0.4	50
77	FIRST: Common-Sense Process Scopes for Starting a Process Improvement Program. Communications in Computer and Information Science, 2012, , 186-197.	0.4	0
78	Med-Trace. Communications in Computer and Information Science, 2011, , 208-211.	0.4	4
79	Standalone Software as an Active Medical Device. Communications in Computer and Information Science, 2011, , 97-107.	0.4	15
80	Proposing an ISO/IEC 15504-2 Compliant Method for Process Capability/Maturity Models Customization. Lecture Notes in Computer Science, 2011, , 44-58.	1.0	9
81	Verification & Validation in Medi SPICE. Communications in Computer and Information Science, 2011, , 73-83.	0.4	0
82	Challenges for Requirements Development: An Industry Perspective. Communications in Computer and Information Science, 2011, , 217-220.	0.4	0
83	Risk management capability model for the development of medical device software. Software Quality Journal, 2010, 18, 81-107.	1.4	22
84	Medi SPICE development. Journal of Software: Evolution and Process, 2010, 22, 255-268.	1.1	11
85	Creating Software Process Capability/Maturity Models. IEEE Software, 2010, 27, 92-94.	2.1	93
86	Global Software Engineering: A Software Process Approach. , 2010, , 35-56.		31
87	AnnoTestWeb/Run: Annotations Based Acceptance Testing. Lecture Notes in Business Information Processing, 2010, , 381-382.	0.8	0
88	Spreadsheet Information Retrieval through Natural Language. Lecture Notes in Computer Science, 2010, , 297-298.	1.0	0
89	Lightweight SPI assessments: what is the real cost?. Software Process Improvement and Practice, 2009, 14, 271-278.	1.1	11
90	Improving software Risk Management in a Medical Device Company. , 2009, , .		9

#	ARTICLE	IF	CITATIONS
91	Developing acceptance tests from existing documentation using annotations: An experiment. , 2009, , .		2
92	Automating Expert-Defined Tests: A Suitable Approach for the Medical Device Industry?. Communications in Computer and Information Science, 2009, , 32-43.	0.4	1
93	Automotive-adept: A lightweight assessment method for the automotive software industry. Software Process Improvement and Practice, 2008, 13, 345-353.	1.1	1
94	Ahaa --agile, hybrid assessment method for automotive, safety critical smes. , 2008, , .		24
95	Intelligent Voice Navigation of Spreadsheets. Lecture Notes in Computer Science, 2008, , 577-584.	1.0	1
96	Mapping Medical Device Standards Against the CMMI for Configuration Management. Communications in Computer and Information Science, 2008, , 153-164.	0.4	1
97	Improving Software Risk Management Practices in a Medical Device Company. , 2008, , 24-35.		0
98	A risk management capability model for use in medical device companies. , 2006, , .		20
99	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
100	Introducing Agility into Plan-Based Assessments. Advances in Computer and Electrical Engineering Book Series, 0, , 281-314.	0.2	0