Fergal Mc Caffery

List of Publications by Citations

105 papers	718 citations	13 h-index	23 g-index
109 ext. papers	861 ext. citations	0.7 avg, IF	4.07 L-index

#	Paper	IF	Citations
105	Hybrid software and system development in practice: waterfall, scrum, and beyond **2017**,		112
104	Creating Software Process Capability/Maturity Models. *IEEE Software*, **2010**, 27, 92-94	1.5	74
103	A Process Framework for Global Software Engineering Teams. *Information and Software Technology* , **2012**, 54, 1175-1191	3.4	57
102	The Gamification of SPICE. *Communications in Computer and Information Science*, **2012**, 295-301	0.3	42
101	Hybrid Software Development Approaches in Practice: A European Perspective. *IEEE Software*, **2019**, 36, 20-31	1.5	30
100	Global Software Engineering: A Software Process Approach **2010**, 35-56		21
99	Barriers to Adopting Agile Practices When Developing Medical Device Software. *Communications in Computer and Information Science*, **2012**, 141-147	0.3	20
98	Ahaa --agile, hybrid assessment method for automotive, safety critical smes **2008**,		20
97	Risk management capability model for the development of medical device software. *Software Quality Journal*, **2010**, 18, 81-107	1.2	17
96	The Barriers to Traceability and their Potential Solutions: Towards a Reference Framework **2012**,		16
95	An agile process model for product derivation in software product line engineering. *Journal of Software: Evolution and Process*, **2012**, 24, 561-571	1	14
94	A risk management capability model for use in medical device companies **2006**,		14
93	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	3.5	13
92	Medical Device Software Traceability **2012**, 321-339		12
91	Lightweight SPI assessments: what is the real cost?. *Software Process Improvement and Practice*, **2009**, 14, 271-278		11
90	Standalone Software as an Active Medical Device. *Communications in Computer and Information Science*, **2011**, 97-107	0.3	10
89	Balancing Agility and Discipline in a Medical Device Software Organisation. *Communications in Computer and Information Science*, **2013**, 199-210	0.3	9

88	Development and benefits of MDevSPICE® , the medical device software process assessment framework. *Journal of Software: Evolution and Process*, **2016**, 28, 800-816	1	9
87	A lightweight traceability assessment method for medical device software. *Journal of Software: Evolution and Process*, **2013**, 25, 363-372	1	8
86	Adopting agile practices when developing software for use in the medical domain. *Journal of Software: Evolution and Process*, **2014**, 26, 504-512	1	8
85	An Agile Implementation within a Medical Device Software Organisation. *Communications in Computer and Information Science*, **2014**, 190-201	0.3	7
84	Improving software Risk Management in a Medical Device Company **2009**,		7
83	Assessing a hospital's medical IT network risk management practice with 80001-1. *Biomedical Instrumentation and Technology*, **2014**, 48, 64-71	0.4	6
82	Tailoring software process capability/maturity models for the health domain. *Health and Technology*, **2013**, 3, 11-28	2.1	6
81	Piloting MDevSPICE: the medical device software process assessment framework **2015**,		6
80	A roadmap to ISO 14971 implementation. *Journal of Software: Evolution and Process*, **2015**, 27, 319-336	1	6
79	Proposing an ISO/IEC 15504-2 Compliant Method for Process Capability/Maturity Models Customization. *Lecture Notes in Computer Science*, **2011**, 44-58	0.9	6
78	Development of a Process Assessment Model for Assessing Medical IT Networks against IEC 80001-1. *Communications in Computer and Information Science*, **2012**, 148-160	0.3	6
77	Safety Critical Software Process Assessment: How MDevSPICE® Addresses the Challenge of Integrating Compliance and Capability. *Communications in Computer and Information Science*, **2015**, 13-18	0.3	5
76	Research findings from an industrial trial of a traceability assessment and implementation framework **2016**,		5
75	Revising IEC 80001-1: Risk management of health information technology systems. *Computer Standards and Interfaces*, **2018**, 60, 67-72	3.5	5
74	Development of MDevSPICE® the medical device software process assessment framework. *Journal of Software: Evolution and Process*, **2015**, 27, 565-572	1	5
73	Assessing traceability practical experiences and lessons learned. *Journal of Software: Evolution and Process*, **2015**, 27, 591-601	1	5
72	Traceability-Why Do It?. *Communications in Computer and Information Science*, **2012**, 161-172	0.3	5
71	Situational Factors in Safety Critical Software Development. *Communications in Computer and Information Science*, **2016**, 132-147	0.3	5

70	A Methodology for Software Process Improvement Roadmaps for Regulated Domains Example with IEC 62366. *Communications in Computer and Information Science*, **2013**, 25-35	0.3	5
69	A Traceability Process Assessment Model for the Medical Device Domain. *Communications in Computer and Information Science*, **2014**, 206-216	0.3	5
68	To what extent the medical device software regulations can be achieved with agile software development methods? XP DSDM Scrum. *Journal of Supercomputing*, **2019**, 75, 5227-5260	2.5	5
67	A Security Argument Pattern for Medical Device Assurance Cases **2014**,		4
66	The Development and Validation of a Traceability Assessment Model. *Communications in Computer and Information Science*, **2014**, 72-83	0.3	4
65	Med-Trace. *Communications in Computer and Information Science*, **2011**, 208-211	0.3	4
64	Development of the Medi SPICE PRM. *Communications in Computer and Information Science*, **2012**, 265-268	0.3	4
63	Creation of an IEC 62304 compliant software development plan. *Journal of Software: Evolution and Process*, **2016**, 28, 1005-1010	1	4
62	Tailoring MDevSPICE for mobile medical apps **2016**,		4
61	A hybrid assessment approach for medical device software development companies. *Journal of Software: Evolution and Process*, **2018**, 30, e1929	1	3
60	Agile Is it Suitable for Medical Device Software Development?. *Communications in Computer and Information Science*, **2016**, 417-422	0.3	3
59	Changes to the International Regulatory Environment. *Journal of Medical Devices, Transactions of the ASME*, **2012**, 6,	1.3	3
58	How Can Software SMEs Become Medical Device Software SMEs. *Communications in Computer and Information Science*, **2011**, 247-258	0.3	3
57	Medi SPICE development. *Journal of Software: Evolution and Process*, **2010**, 22, n/a-n/a		3
56	A proposed way for European software industries to achieve growth within the global marketplace. *Software Process Improvement and Practice*, **2006**, 11, 277-285		3
55	Risk management of medical IT networks: an ISO/IEC 15504 compliant approach to assessment against IEC 80001-1 **2013**,		3
54	A Lightweight Assessment Method for Medical Device Software Processes. *Communications in Computer and Information Science*, **2014**, 144-156	0.3	3
53	A Critical Evaluation of a Methodology for the Generation of Software Process Improvement Roadmaps. *Communications in Computer and Information Science*, **2014**, 36-47	0.3	3

52	Risk Management: Achieving Higher Maturity & Capability Levels through the LEGO Approach **2016**,		3
51	Mobile medical app development with a focus on traceability. *Journal of Software: Evolution and Process*, **2017**, 29, e1861	1	2
50	The Development and Validation of a Roadmap for Traceability. *Communications in Computer and Information Science*, **2015**, 45-57	0.3	2
49	Development and validation of the MedITNet assessment framework: improving risk management of medical IT networks **2015**,		2
48	Developing acceptance tests from existing documentation using annotations: An experiment **2009**,		2
47	A Developer Driven Framework for Security and Privacy in the Internet of Medical Things. *Communications in Computer and Information Science*, **2020**, 107-119	0.3	2
46	Analysis of Attacks and Security Requirements for Wireless Body Area Networks - A Systematic Literature Review. *Communications in Computer and Information Science*, **2019**, 439-452	0.3	2
45	MDevSPICE - A Comprehensive Solution for Manufacturers and Assessors of Safety-Critical Medical Device Software. *Communications in Computer and Information Science*, **2014**, 274-278	0.3	2
44	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	0.3	2
43	Towards an International Security Case Framework for Networked Medical Devices. *Lecture Notes in Computer Science*, **2015**, 197-209	0.9	2
42	How Does Scrum Conform to the Regulatory Requirements Defined in MDevSPICE ?. *Communications in Computer and Information Science*, **2017**, 257-268	0.3	2
41	A Process Assessment Model for Security Assurance of Networked Medical Devices. *Communications in Computer and Information Science*, **2013**, 25-36	0.3	2
40	The Approach to the Development of an Assessment Method for IEC 80001-1. *Communications in Computer and Information Science*, **2013**, 37-48	0.3	2
39	MeD UD A Process Reference Model for Usability Design in Medical Devices. *Lecture Notes in Computer Science*, **2013**, 224-239	0.9	2
38	Investigation of Traceability within a Medical Device Organization. *Communications in Computer and Information Science*, **2013**, 211-222	0.3	2
37	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
36	A Process Framework Combining Safety and Security in Practice. *Communications in Computer and Information Science*, **2018**, 173-180	0.3	2
35	Approach to the development of a Unified Framework for Safety Critical Software Development. *Computer Standards and Interfaces*, **2017**, 54, 152-161	3.5	1

34	Taxonomy-based testing and validation of a new defect classification for health software. *Journal of Software: Evolution and Process*, **2019**, 31, e1985	1	1
33	Automotive-dept: A lightweight assessment method for the automotive software industry. *Software Process Improvement and Practice*, **2008**, 13, 345-353		1
32	Mapping Medical Device Standards Against the CMMI for Configuration Management. *Communications in Computer and Information Science*, **2008**, 153-164	0.3	1
31	A Serverless Architecture for Wireless Body Area Network Applications. *Lecture Notes in Computer Science*, **2019**, 239-254	0.9	1
30	Evaluation of a Dependability Mechanism for Cyber Physical Systems. *Communications in Computer and Information Science*, **2019**, 427-438	0.3	1
29	Safety Critical Software Development - Extending Quality Management System Practices to Achieve Compliance with Regulatory Requirements. *Communications in Computer and Information Science*, **2016**, 17-30	0.3	1
28	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	0.3	1
27	Intelligent Voice Navigation of Spreadsheets. *Lecture Notes in Computer Science*, **2008**, 577-584	0.9	1
26	A Security Assurance Framework for Networked Medical Devices. *Lecture Notes in Computer Science* , **2013**, 363-366	0.9	1
25	A Lightweight Software Process Assessment Approach Based on MDevSPICE for Medical Device Development Domain. *Communications in Computer and Information Science*, **2017**, 578-588	0.3	1
24	Improving Safety in Medical Devices from Concept to Retirement **2013**, 453-480		1
23	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	0.3	1
22	Investigating the Suitability of Using Agile for Medical Embedded Software Development. *Communications in Computer and Information Science*, **2016**, 409-416	0.3	1
21	Improving Communication in Risk Management of Health Information Technology Systems by means of Medical Text Simplification **2019**,		1
20	Quality improvement mechanism for cyber physical systems-An evaluation. *Journal of Software: Evolution and Process*, **2020**, 32, e2295	1	0
19	Agile Usage in Embedded Software Development in Safety Critical Domain-A Systematic Review. *Communications in Computer and Information Science*, **2018**, 316-326	0.3	0
18	Achieving Data Privacy with a Dependability Mechanism for Cyber Physical Systems. *Communications in Computer and Information Science*, **2020**, 511-524	0.3	
17	Introducing Agility into Plan-Based Assessments. *Advances in Computer and Electrical Engineering Book Series*,281-314	0.3	

16	Improving Software Risk Management Practices in a Medical Device Company **2008**, 24-35	
15	Experimenting with Agile Practices First Things First. *Lecture Notes in Computer Science*, **2006**, 205-208	0.9
14	Adopting Agile in the Sports Domain: A Phased Approach. *Communications in Computer and Information Science*, **2018**, 275-288	0.3
13	A Framework for Taxonomy Based Testing Using Classification of Defects in Health Software-SW91. *Communications in Computer and Information Science*, **2019**, 606-618	0.3
12	Software or Service? That the Question!. *Lecture Notes in Business Information Processing*, **2015**, 30-45	0.6
11	A Proposed Approach to the Revision of IEC 80001-1 Following Annex SL. *Communications in Computer and Information Science*, **2017**, 289-301	0.3
10	Automating Expert-Defined Tests: A Suitable Approach for the Medical Device Industry?. *Communications in Computer and Information Science*, **2009**, 32-43	0.3
9	AnnoTestWeb/Run: Annotations Based Acceptance Testing. *Lecture Notes in Business Information Processing*, **2010**, 381-382	0.6
8	Spreadsheet Information Retrieval through Natural Language. *Lecture Notes in Computer Science*, **2010**, 297-298	0.9
7	Improving Verification & Validation in the Medical Device Domain. *Communications in Computer and Information Science*, **2011**, 61-71	0.3
6	Verification & Validation in Medi SPICE. *Communications in Computer and Information Science*, **2011**, 73-83	0.3
5	Challenges for Requirements Development: An Industry Perspective. *Communications in Computer and Information Science*, **2011**, 217-220	0.3
4	FIRST: Common-Sense Process Scopes for Starting a Process Improvement Program. *Communications in Computer and Information Science*, **2012**, 186-197	0.3
3	The Development and Current Status of Medi SPICE. *Communications in Computer and Information Science*, **2013**, 49-60	0.3
2	Improving Estimates by Hybriding CMMI and Requirement Engineering Maturity Models A LEGO Application. *Communications in Computer and Information Science*, **2013**, 127-139	0.3
1	A Software Process Improvement Roadmap for IEC 62304: An Expert Review. *Communications in Computer and Information Science*, **2018**, 593-604	0.3