Norman E Fenton

List of Publications by Year
in descending order

154 papers	7,664 citations	93792 39 h-index	81351 76 g-index
171 all docs	171 docs citations	171 times ranked	4671 citing authors

#	Article	IF	Citations
1	Lawmaps: enabling legal AI development through visualisation of the implicit structure of legislation and lawyerly process. Artificial Intelligence and Law, 2023, 31, 169-194.	3.0	3
2	mHealth apps for gestational diabetes mellitus that provide clinical decision support or artificial intelligence: A scoping review. Diabetic Medicine, 2022, 39, e14735.	1.2	17
3	A causal Bayesian network approach for consumer product safety and risk assessment. Journal of Safety Research, 2022, 80, 198-214.	1.7	4
4	Causality, the critical but often ignored component guiding us through a world of uncertainties in risk assessment. Journal of Risk Research, 2021, 24, 617-621.	1.4	4
5	A Study of Using Bethe/Kikuchi Approximation for Learning Directed Graphic Models. IEEE Access, 2021, 9, 125428-125438.	2.6	1
6	Current review and next steps for artificial intelligence in multiple sclerosis risk research. Computers in Biology and Medicine, 2021, 132, 104337.	3.9	10
7	Bayesian networks in healthcare: What is preventing their adoption?. Artificial Intelligence in Medicine, 2021, 116, 102079.	3.8	16
8	A comprehensive scoping review of Bayesian networks in healthcare: Past, present and future. Artificial Intelligence in Medicine, 2021, 117, 102108.	3.8	34
9	Bayesian Hypothesis Testing and Hierarchical Modeling of Ivermectin Effectiveness. American Journal of Therapeutics, 2021, 28, e576-e579.	0.5	6
10	Analyzing the Simonshaven Case Using Bayesian Networks. Topics in Cognitive Science, 2020, 12, 1092-1114.	1.1	9
11	A Bayesian network approach for cybersecurity risk assessment implementing and extending the FAIR model. Computers and Security, 2020, 89, 101659.	4.0	44
12	Learning from Behavioural Changes That Fail. Trends in Cognitive Sciences, 2020, 24, 969-980.	4.0	36
13	Bayesian networks in healthcare: Distribution by medical condition. Artificial Intelligence in Medicine, 2020, 107, 101912.	3.8	87
14	Towards standardisation of evidence-based clinical care process specifications. Health Informatics Journal, 2020, 26, 2512-2537.	1.1	13
15	Bayesian network analysis of Covid-19 data reveals higher infection prevalence rates and lower fatality rates than widely reported. Journal of Risk Research, 2020, 23, 866-879.	1.4	18
16	Dependencies in evidential reports: The case for informational advantages. Cognition, 2020, 204, 104343.	1.1	10
17	Medical idioms for clinical Bayesian network development. Journal of Biomedical Informatics, 2020, 108, 103495.	2.5	25
18	COVID-19 infection and death rates: the need to incorporate causal explanations for the data and avoid bias in testing. Journal of Risk Research, 2020, 23, 862-865.	1.4	37

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19	Propensities and Second Order Uncertainty: A Modified Taxi Cab Problem. Frontiers in Psychology, 2020, 11, 503233.	1.1	5
20	Standardising Clinical Caremaps: Model, Method and Graphical Notation for Caremap Specification. Communications in Computer and Information Science, 2020, , 429-452.	0.4	0
21	Explaining Away, Augmentation, and the Assumption of Independence. Frontiers in Psychology, 2020, 11, 502751.	1.1	2
22	Real-time Online Probabilistic Medical Computation using Bayesian Networks. , 2020, , .		6
23	Managing Knowledge in Computational Models for Global Food, Nutrition and Health Technologies. , 2020, , .		0
24	Data Visualisation in Midwifery: The Challenge of Seeing what Datasets Hide. Studies in Health Technology and Informatics, 2020, 270, 1239-1240.	0.2	0
25	A framework for analysing learning health systems: Are we removing the most impactful barriers?. Learning Health Systems, 2019, 3, e10189.	1.1	26
26	An Extension to the <i>Noisy-OR</i> Function to Resolve the â€˜Explaining Awayâ€™ Deficiency for Practical Bayesian Network Problems. IEEE Transactions on Knowledge and Data Engineering, 2019, 31, 2441-2445.	4.0	16
27	Resolving the so-called â€œprobabilistic paradoxes in legal reasoningâ€• with Bayesian networks. Science and Justice - Journal of the Forensic Science Society, 2019, 59, 367-379.	1.3	12
28	Modelling competing legal arguments using Bayesian model comparison and averaging. Artificial Intelligence and Law, 2019, 27, 403-430.	3.0	18
29	LAGOS: learning health systems and how they can integrate with patient care. BMJ Health and Care Informatics, 2019, 26, e100037.	1.4	9
30	Assessment of the methodological quality of local clinical practice guidelines on the identification and management of gestational diabetes. BMJ Open, 2019, 9, e027285.	0.8	12
31	The Zero-Sum Fallacy in Evidence Evaluation. Psychological Science, 2019, 30, 250-260.	1.8	21
32	Addressing the Practical Limitations of Noisy-OR Using Conditional Inter-Causal Anti-Correlation with Ranked Nodes. IEEE Transactions on Knowledge and Data Engineering, 2019, 31, 813-817.	4.0	6
33	Clinical Caremap Development: How Can Caremaps Standardise Care When They Are Not Standardised?. , 2019, , .		7
34	Realistic Synthetic Data Generation: The ATEN Framework. Communications in Computer and Information Science, 2019, , 497-523.	0.4	6
35	Things to know about Bayesian Networks: Decisions under Uncertainty, Part 2. Significance, 2018, 15, 19-23.	0.3	17
36	An improved method for solving Hybrid Influence Diagrams. International Journal of Approximate Reasoning, 2018, 95, 93-112.	1.9	7

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37	Lawnmowers versus terrorists. Significance, 2018, 15, 12-13.	0.3	1
38	Expected Value of Partial Perfect Information in Hybrid Models Using Dynamic Discretization. IEEE Access, 2018, 6, 7802-7817.	2.6	8
39	Learning health systems: the research community awareness challenge. BMJ Health and Care Informatics, 2018, 25, 38-40.	1.4	7
40	The Heimdall framework for supporting characterisation of learning health systems. BMJ Health and Care Informatics, 2018, 25, 77-87.	1.4	34
41	Whom Do We Trust on Social Policy Interventions?. Basic and Applied Social Psychology, 2018, 40, 249-268.	1.2	22
42	Learning from Data in Bayesian Networks. , 2018, , 553-572.		4
43	Defining the Structure of Bayesian Networks. , 2018, , 201-245.		0
44	The Role of Bayes in Forensic and Legal Evidence Presentation. , 2018, , 493-521.		0
45	Towards smart-data: Improving predictive accuracy in long-term football team performance. Knowledge-Based Systems, 2017, 124, 93-104.	4.0	39
46	The opportunity prior. , 2017, , .		4
47	The future of the London Buy-To-Let property market: Simulation with temporal Bayesian Networks. PLoS ONE, 2017, 12, e0179297.	1.1	6
48	Using Bayesian networks to guide the assessment of new evidence in an appeal case. Crime Science, 2016, 5, 9.	1.4	14
49	Integrating expert knowledge with data in Bayesian networks: Preserving data-driven expectations when the expert variables remain unobserved. Expert Systems With Applications, 2016, 56, 197-208.	4.4	69
50	When and where to transfer for Bayesian network parameter learning. Expert Systems With Applications, 2016, 55, 361-373.	4.4	28
51	A Bayesian network framework for project cost, benefit and risk analysis with an agricultural development case study. Expert Systems With Applications, 2016, 60, 141-155.	4.4	90
52	How to model mutually exclusive events based on independent causal pathways in Bayesian network models. Knowledge-Based Systems, 2016, 113, 39-50.	4.0	23
53	An empirical study of Bayesian network parameter learning with monotonic influence constraints. Decision Support Systems, 2016, 87, 69-79.	3.5	37
54	From complex questionnaire and interviewing data to intelligent Bayesian network models for medical decision support. Artificial Intelligence in Medicine, 2016, 67, 75-93.	3.8	119

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55	Bayes and the Law. Annual Review of Statistics and Its Application, 2016, 3, 51-77.	4.1	48
56	Value of information analysis for interventional and counterfactual Bayesian networks in forensic medical sciences. Artificial Intelligence in Medicine, 2016, 66, 41-52.	3.8	17
57	Improving risk management for violence in mental health services: a multimethods approach. Programme Grants for Applied Research, 2016, 4, 1-408.	0.4	16
58	Policy: Development goals should enable decision-making. Nature, 2015, 523, 152-154.	13.7	44
59	Risk assessment and risk management of violent reoffending among prisoners. Expert Systems With Applications, 2015, 42, 7511-7529.	4.4	36
60	Modelling crime linkage with Bayesian networks. Science and Justice - Journal of the Forensic Science Society, 2015, 55, 209-217.	1.3	20
61	Causal analysis for attributing responsibility in legal cases. , 2015, , .		9
62	Assessing evidence and testing appropriate hypotheses. Science and Justice - Journal of the Forensic Science Society, 2014, 54, 502-504.	1.3	6
63	Risk aggregation in the presence of discrete causally connected random variables. Annals of Actuarial Science, 2014, 8, 298-319.	1.0	8
64	Not just data: A method for improving prediction with knowledge. Journal of Biomedical Informatics, 2014, 48, 28-37.	2.5	49
65	Bayesian network approach to multinomial parameter learning using data and expert judgments. International Journal of Approximate Reasoning, 2014, 55, 1252-1268.	1.9	68
66	Calculating and understanding the value of any type of match evidence when there are potential testing errors. Artificial Intelligence and Law, 2014, 22, 1-28.	3.0	18
67	Decision Support Software for Probabilistic Risk Assessment Using Bayesian Networks. IEEE Software, 2014, 31, 21-26.	2.1	26
68	Response to â€œOn the use of the likelihood ratio for forensic evaluation: Response to Fenton et al.â€•. Science and Justice - Journal of the Forensic Science Society, 2014, 54, 319-320.	1.3	6
69	When â€˜neutralâ€™ evidence still has probative value (with implications from the Barry George Case). Science and Justice - Journal of the Forensic Science Society, 2014, 54, 274-287.	1.3	27
70	Bayesian networks for unbiased assessment of referee bias in Association Football. Psychology of Sport and Exercise, 2014, 15, 538-547.	1.1	18
71	An Extended MPL-C Model for Bayesian Network Parameter Learning with Exterior Constraints. Lecture Notes in Computer Science, 2014, , 581-596.	1.0	3
72	Profiting from an inefficient association football gambling market: Prediction, risk and uncertainty using Bayesian networks. Knowledge-Based Systems, 2013, 50, 60-86.	4.0	38

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73	Determining the level of ability of football teams by dynamic ratings based on the relative discrepancies in scores between adversaries. Journal of Quantitative Analysis in Sports, 2013, 9, 37-50.	0.5	37
74	A General Structure for Legal Arguments About Evidence Using Bayesian Networks. Cognitive Science, 2013, 37, 61-102.	0.8	112
75	Legal idioms: a framework for evidential reasoning. Argument and Computation, 2013, 4, 46-63.	0.7	46
76	Profiting from arbitrage and odds biases of the European football gambling market. The Journal of Gambling Business and Economics, 2013, 7, 41-70.	0.2	21
77	Optimizing the Calculation of Conditional Probability Tables in Hybrid Bayesian Networks Using Binary Factorization. IEEE Transactions on Knowledge and Data Engineering, 2012, 24, 1306-1312.	4.0	18
78	pi-football: A Bayesian network model for forecasting Association Football match outcomes. Knowledge-Based Systems, 2012, 36, 322-339.	4.0	94
79	Solving the Problem of Inadequate Scoring Rules for Assessing Probabilistic Football Forecast Models. Journal of Quantitative Analysis in Sports, 2012, 8, .	0.5	37
80	Improve statistics in court. Nature, 2011, 479, 36-37.	13.7	27
81	Extending Support Vector Machines to Discover Temporal Periodic Patterns. , 2010, , .		0
82	Comparing risks of alternative medical diagnosis using Bayesian arguments. Journal of Biomedical Informatics, 2010, 43, 485-495.	2.5	32
83	Improved reliability modeling using Bayesian networks and dynamic discretization. Reliability Engineering and System Safety, 2010, 95, 412-425.	5.1	111
84	Software Project and Quality Modelling Using Bayesian Networks. Advances in Computational Intelligence and Robotics Book Series, 2010, , 1-25.	0.4	8
85	Modelling Project Trade-Off Using Bayesian Networks. , 2009, , .		6
86	Predicting Project Velocity in XP Using a Learning Dynamic Bayesian Network Model. IEEE Transactions on Software Engineering, 2009, 35, 124-137.	4.3	49
87	On the effectiveness of early life cycle defect prediction with Bayesian Nets. Empirical Software Engineering, 2008, 13, 499-537.	3.0	112
88	Modelling dependable systems using hybrid Bayesian networks. Reliability Engineering and System Safety, 2008, 93, 933-939.	5.1	51
89	Using Bayesian networks to predict software defects and reliability. Proceedings of the Institution of Mechanical Engineers, Part O: Journal of Risk and Reliability, 2008, 222, 701-712.	0.6	48
90	Solving dynamic fault trees using a new Hybrid Bayesian Network inference algorithm. , 2008, , .		16

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91	Using Ranked Nodes to Model Qualitative Judgments in Bayesian Networks. IEEE Transactions on Knowledge and Data Engineering, 2007, 19, 1420-1432.	4.0	170
92	Project Data Incorporating Qualitative Factors for Improved Software Defect Prediction. , 2007, , .		25
93	Project Scheduling: Improved Approach to Incorporate Uncertainty Using Bayesian Networks. Project Management Journal, 2007, 38, 39-49.	2.6	64
94	Predicting software defects in varying development lifecycles using Bayesian nets. Information and Software Technology, 2007, 49, 32-43.	3.0	151
95	Modeling dependable systems using hybrid Bayesian networks. , 2006, , .		18
96	Predicting football results using Bayesian nets and other machine learning techniques. Knowledge-Based Systems, 2006, 19, 544-553.	4.0	84
97	Risk and confidence analysis for fuzzy multicriteria decision making. Knowledge-Based Systems, 2006, 19, 430-437.	4.0	104
98	Improved Bayesian Networks for Software Project Risk Assessment Using Dynamic Discretisation. , 2006, , 139-148.		3
99	Comment: Expert Elicitation for Reliable System Design. Statistical Science, 2006, 21, .	1.6	3
100	Using Bayesian Networks to Model Expected and Unexpected Operational Losses. Risk Analysis, 2005, 25, 963-972.	1.5	119
101	Automated population of causal models for improved software risk assessment. , 2005, , .		3
102	Software Quality Prediction Using Bayesian Networks. , 2003, , 136-172.		11
103	Probabilistic modelling for software quality control. Journal of Applied Non-Classical Logics, 2002, 12, 173-188.	0.4	11
104	Software measurement: uncertainty and causal modeling. IEEE Software, 2002, 19, 116-122.	2.1	128
105	Making decisions: using Bayesian nets and MCDA. Knowledge-Based Systems, 2001, 14, 307-325.	4.0	99
106	Viewpoint Article: Conducting and Presenting Empirical Software Engineering. Empirical Software Engineering, 2001, 6, 195-200.	3.0	18
107	Probabilistic Modelling for Software Quality Control. Lecture Notes in Computer Science, 2001, , 444-453.	1.0	6
108	Using Bayesian belief networks to predict the reliability of military vehicles. Computing & Control Engineering Journal, 2001, 12, 11-20.	0.0	65

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109	Building large-scale Bayesian networks. Knowledge Engineering Review, 2000, 15, 257-284.	2.1	218
110	Quantitative analysis of faults and failures in a complex software system. IEEE Transactions on Software Engineering, 2000, 26, 797-814.	4.3	515
111	Software metrics. , 2000, , .		182
112	Software metrics: successes, failures and new directions. Journal of Systems and Software, 1999, 47, 149-157.	3.3	167
113	A critique of software defect prediction models. IEEE Transactions on Software Engineering, 1999, 25, 675-689.	4.3	745
114	Effects of structure on the comprehensibility of formal specifications. IET Software, 1999, 146, 193.	1.0	11
115	A strategy for improving safety related software engineering standards. IEEE Transactions on Software Engineering, 1998, 24, 1002-1013.	4.3	28
116	Implementing effective software metrics programs. IEEE Software, 1997, 14, 55-65.	2.1	115
117	Reply To: Comments On "towards A Framework Of Software Measurement Validation". IEEE Transactions on Software Engineering, 1997, 23, 189-189.	4.3	13
118	The Role of Measurement in Software Safety Assessment. , 1997, , 217-248.		2
119	How to Improve Safety Critical Systems Standards. , 1997, , 96-110.		1
120	Point counterpoint: do standards improve quality?. IEEE Software, 1996, 13, 22-24.	2.1	9
121	Evaluating the effectiveness of Z: The claims made about CICS and where we go from here. Journal of Systems and Software, 1996, 35, 209-216.	3.3	6
122	Software quality programmes: a snapshot of theory versus reality. Software Quality Journal, 1996, 5, 235-242.	1.4	3
123	Applying Bayesian Belief Networks to System Dependability Assessment. , 1996, , 71-94.		43
124	Towards a framework for software measurement validation. IEEE Transactions on Software Engineering, 1995, 21, 929-944.	4.3	371
125	Software Metrics: a Practitioner's Guide to Improved Product Development. Software Engineering Journal, 1994, 9, 40.	0.7	0
126	Implementing software metrics ? the critical success factors. Software Quality Journal, 1994, 3, 195-208.	1.4	10

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127	Evaluating software engineering standards. Computer, 1994, 27, 71-79.	1.2	51
128	Science and substance: a challenge to software engineers. IEEE Software, 1994, 11, 86-95.	2.1	187
129	Software measurement: a necessary scientific basis. IEEE Transactions on Software Engineering, 1994, 20, 199-206.	4.3	360
130	How effective are software engineering methods?. Journal of Systems and Software, 1993, 22, 141-146.	3.3	36
131	Towards Operational Measures of Computer Security. Journal of Computer Security, 1993, 2, 211-229.	0.5	147
132	Software quality: Theory and management. Alan C. Gillies. Published by Chapman & Hall, London, U.K., 1992. ISBN 0 412 4513 0, 250 pages. Price: Â£19.95, Soft Cover. Software Testing Verification and Reliability, 1992, 2, 155-155.	1.7	1
133	Moving From Philosophy to Practice in Software Measurement. Workshops in Computing, 1992, , 38-59.	0.4	3
134	When a software measure is not a measure. Software Engineering Journal, 1992, 7, 357.	0.7	20
135	Software Measurement: Why a Formal Approach?. Workshops in Computing, 1992, , 3-27.	0.4	1
136	Validating software measures. Software Testing Verification and Reliability, 1991, 1, 27-42.	1.7	14
137	Program structures: Some new characterisations. Journal of Computer and System Sciences, 1991, 43, 467-483.	0.9	0
138	Deriving structurally based software measures. Journal of Systems and Software, 1990, 12, 177-187.	3.3	75
139	Software measurement: A conceptual framework. Journal of Systems and Software, 1990, 12, 223-231.	3.3	42
140	A philosophy for software measurement. Journal of Systems and Software, 1990, 12, 277-281.	3.3	71
141	Software metrics: theory, tools and validation. Software Engineering Journal, 1990, 5, 65.	0.7	15
142	A note on the use of Z to specify flowgraph decomposition. Information and Software Technology, 1988, 30, 432-437.	3.0	9
143	Metrics and software structure. Information and Software Technology, 1987, 29, 301-320.	3.0	48
144	Axiomatic approach to Software Metrication through Program Decomposition. Computer Journal, 1986, 29, 330-339.	1.5	58

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145	A generalised mathematical theory of structured programming. Theoretical Computer Science, 1985, 36, 145-171.	0.5	22
146	A rigorous approach to structural analysis and metrication of software. Software & Microsystems, 1985, 4, 2.	0.1	7
147	MATROID REPRESENTATIONSâ€"AN ALGEBRAIC TREATMENT. Quarterly Journal of Mathematics, 1984, 35, 263-280.	0.3	8
148	Matroid Representation of Projective Spaces. European Journal of Combinatorics, 1984, 5, 123-126.	0.5	0
149	CHARACTERIZATION OF ATOMIC MATROIDS. Quarterly Journal of Mathematics, 1983, 34, 49-60.	0.3	2
150	The opportunity prior: a proof-based prior for criminal cases. Law, Probability and Risk, 0, , .	1.2	1
151	Risk Assessment and Decision Analysis with Bayesian Networks. , 0, , .		92
152	Risk Assessment and Decision Analysis with Bayesian Networks. , 0, , .		165
153	Software Metrics. , 0, , .		203
154	Improved High Dimensional Discrete Bayesian Network Inference using Triplet Region Construction. Journal of Artificial Intelligence Research, 0, 69, 231-295.	7.0	7