

# David J Hutchison

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/503383/publications.pdf>

Version: 2024-02-01

61  
papers

2,685  
citations

471061

17  
h-index

243296

44  
g-index

64  
all docs

64  
docs citations

64  
times ranked

2536  
citing authors

| #  | ARTICLE   | IF   | CITATIONS |
|----|---|------|-----------|
| 1  | Resilience and survivability in communication networks: Strategies, principles, and survey of disciplines. <i>Computer Networks</i> , 2010, 54, 1245-1265.  | 3.2  | 557       |
| 2  | A quality of service architecture. <i>Computer Communication Review</i> , 1994, 24, 6-27.   | 1.5  | 289       |
| 3  | A survey of cyber security management in industrial control systems. <i>International Journal of Critical Infrastructure Protection</i> , 2015, 9, 52-80.   | 2.9  | 222       |
| 4  | The Extended Cloud: Review and Analysis of Mobile Edge Computing and Fog From a Security and Resilience Perspective. <i>IEEE Journal on Selected Areas in Communications</i> , 2017, 35, 2586-2595. | 9.7  | 208       |
| 5  | Scalable Bloom Filters. <i>Information Processing Letters</i> , 2007, 101, 255-261.   | 0.4  | 158       |
| 6  | Game Theory for Multi-Access Edge Computing: Survey, Use Cases, and Future Trends. <i>IEEE Communications Surveys and Tutorials</i> , 2019, 21, 260-288.  | 24.8 | 142       |
| 7  | Network resilience: a systematic approach. <i>IEEE Communications Magazine</i> , 2011, 49, 88-97.   | 4.9  | 131       |
| 8  | Malware Detection in Cloud Computing Infrastructures. <i>IEEE Transactions on Dependable and Secure Computing</i> , 2016, 13, 192-205.  | 3.7  | 120       |
| 9  | A survey of strategies for communication networks to protect against large-scale natural disasters. , 2016, , .   |      | 90        |
| 10 | Review and analysis of networking challenges in cloud computing. <i>Journal of Network and Computer Applications</i> , 2016, 60, 113-129.   | 5.8  | 73        |
| 11 | Network service orchestration standardization: A technology survey. <i>Computer Standards and Interfaces</i> , 2017, 54, 203-215.   | 3.8  | 70        |
| 12 | Redundancy, diversity, and connectivity to achieve multilevel network resilience, survivability, and disruption tolerance invited paper. <i>Telecommunication Systems</i> , 2014, 56, 17-31.        | 1.6  | 56        |
| 13 | A Scalable User Fairness Model for Adaptive Video Streaming Over SDN-Assisted Future Networks. <i>IEEE Journal on Selected Areas in Communications</i> , 2016, 34, 2168-2184.                       | 9.7  | 47        |
| 14 | Disaster-resilient communication networks: Principles and best practices. , 2016, , .   |      | 42        |
| 15 | Evaluation of Anomaly Detection techniques for SCADA communication resilience. , 2016, , .  |      | 36        |
| 16 | Architecture and design for resilient networked systems. <i>Computer Communications</i> , 2018, 131, 13-21.   | 3.1  | 36        |
| 17 | Fog computing systems: State of the art, research issues and future trends, with a focus on resilience. <i>Journal of Network and Computer Applications</i> , 2020, 169, 102784.                    | 5.8  | 35        |
| 18 | An Inter-Domain Collaboration Scheme to Remedy DDoS Attacks in Computer Networks. <i>IEEE Transactions on Network and Service Management</i> , 2018, 15, 879-893.                                   | 3.2  | 30        |

| #  | ARTICLE  | IF   | CITATIONS |
|----|--|------|-----------|
| 19 | Assessing the impact of intra-cloud live migration on anomaly detection. , 2014, , .   |      | 26        |
| 20 | Self-Organization and Resilience for Networked Systems: Design Principles and Open Research Issues. Proceedings of the IEEE, 2019, 107, 819-834.   | 16.4 | 26        |
| 21 | Hybrid self-organizing feature map (SOM) for anomaly detection in cloud infrastructures using granular clustering based upon value-difference metrics. Information Sciences, 2019, 494, 247-277.   | 4.0  | 18        |
| 22 | The Great Plains Environment for Network Innovation (GpENI): A Programmable Testbed for Future Internet Architecture Research. Lecture Notes of the Institute for Computer Sciences, Social-Informatics and Telecommunications Engineering, 2011, , 428-441. | 0.2  | 17        |
| 23 | Technology-related disasters: A survey towards disaster-resilient Software Defined Networks. , 2016, , .   |      | 17        |
| 24 | QoS filters: Addressing the heterogeneity gap. Lecture Notes in Computer Science, 1996, , 227-243.   | 1.0  | 17        |
| 25 | An adaptive approach to network resilience: Evolving challenge detection and mitigation. , 2011, , .   |      | 16        |
| 26 | NETKIT. Computer Communication Review, 2003, 33, 55-66.  | 1.5  | 15        |
| 27 | Towards Pseudonymous e-Commerce. Electronic Commerce Research, 2004, 4, 83-111.  | 3.0  | 15        |
| 28 | Management patterns: SDN-enabled network resilience management. , 2014, , .  |      | 15        |
| 29 | An Analysis of Cyber Security Attack Taxonomies. , 2018, , .   |      | 15        |
| 30 | Transporting QoS adaptive flows. Multimedia Systems, 1998, 6, 167-178.   | 3.0  | 14        |
| 31 | Fundamentals of Communication Networks Resilience to Disasters and Massive Disruptions. Computer Communications and Networks, 2020, , 1-43.  | 0.8  | 14        |
| 32 | “Talking a different Language” Anticipating adversary attack cost for cyber risk assessment. Computers and Security, 2021, 103, 102163.  | 4.0  | 11        |
| 33 | A framework for resilience management in the cloud. Elektrotechnik Und Informationstechnik, 2015, 132, 122-132.  | 0.7  | 10        |
| 34 | Modeling cooperative behavior for resilience in cyber-physical systems using SDN and NFV. SN Applied Sciences, 2020, 2, 1.   | 1.5  | 9         |
| 35 | A Cyber Incident Response and Recovery Framework to Support Operators of Industrial Control Systems. International Journal of Critical Infrastructure Protection, 2022, 37, 100505.  | 2.9  | 8         |
| 36 | Strategies for Network Resilience: Capitalising on Policies. Lecture Notes in Computer Science, 2010, , 118-122.   | 1.0  | 7         |

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|----|--|-----|-----------|
| 37 | A multi-level approach to resilience of critical infrastructures and services. , 2016, , .   |     | 6         |
| 38 | Dynamic deployment and reconfiguration of ad-hoc routing protocols. Journal of Internet Services and Applications, 2010, 1, 135-152.   | 1.6 | 5         |
| 39 | Threat awareness for critical infrastructures resilience. , 2016, , .  |     | 5         |
| 40 | "How Long is a Piece of String"?. , 2017, , .  |     | 5         |
| 41 | Internet Evolution: Critical Issues. IEEE Internet Computing, 2020, 24, 5-14.  | 3.2 | 5         |
| 42 | Resilience Enhancement at Edge Cloud Systems. IEEE Access, 2022, 10, 45190-45206.  | 2.6 | 5         |
| 43 | High-speed, in-band performance measurement instrumentation for next generation IP networks. Computer Networks, 2010, 54, 3246-3263.   | 3.2 | 4         |
| 44 | Low-Overhead End-to-End Performance Measurement for Next Generation Networks. IEEE Transactions on Network and Service Management, 2011, 8, 1-14.  | 3.2 | 4         |
| 45 | Surveillance and security: protecting electricity utilities and other critical infrastructures. Energy Informatics, 2018, 1, .   | 1.4 | 4         |
| 46 | The UK Programmable Fixed and Mobile Internet Infrastructure: Overview, Capabilities and Use Cases Deployment. IEEE Access, 2020, 8, 175398-175411.  | 2.6 | 4         |
| 47 | Situational Awareness for Improving Network Resilience Management. Lecture Notes in Computer Science, 2013, , 31-43.   | 1.0 | 4         |
| 48 | Scalability improvement of the real time control protocol. Computer Communications, 2005, 28, 136-149.   | 3.1 | 3         |
| 49 | Towards Real-Time Assessment of Industrial Control Systems (ICSs): A Framework for Future Research. , 0, , .   |     | 3         |
| 50 | Human and Organizational Issues for Resilient Communications. Computer Communications and Networks, 2020, , 791-807.   | 0.8 | 3         |
| 51 | QoS Filtering and Resource Reservation in an Internet Environment. Multimedia Tools and Applications, 2001, 13, 285-306.   | 2.6 | 2         |
| 52 | A Situation Aware Information Infrastructure ( \$\$\$\$AI^2\$\$\$ S A I 2 ) Framework. Lecture Notes of the Institute for Computer Sciences, Social-Informatics and Telecommunications Engineering, 2017, , 186-194. | 0.2 | 2         |
| 53 | A flexible ICT architecture to support ancillary services in future electricity distribution networks: an accounting use case for DSOs. Energy Informatics, 2020, 3, .   | 1.4 | 2         |
| 54 | A performance study of RSVP with proposed extensions. Computer Communications, 2002, 25, 1782-1798.  | 3.1 | 1         |

| #  | ARTICLE   | IF  | CITATIONS |
|----|---|-----|-----------|
| 55 | Towards an autonomous resilience strategy the implementation of a self evolving rate limiter. , 2013, , .                                 |     | 0         |
| 56 | Towards policy refinement for resilience management in cloud. , 2016, , .   |     | 0         |
| 57 | Attack Pattern Recognition Through Correlating Cyber Situational Awareness in Computer Networks. , 2014, , 125-134.                       |     | 0         |
| 58 | Management Patterns for Network Resilience: Design and Verification of Policy Configurations. , 2014, , 85-95.                            |     | 0         |
| 59 | A Multi-commodity Network Flow Model for Cloud Service Environments. Communications in Computer and Information Science, 2016, , 186-197. | 0.4 | 0         |
| 60 | Resilient NFV Technology and Solutions. Computer Communications and Networks, 2020, , 675-697.  | 0.8 | 0         |
| 61 | Improving network resilience with Middlebox Minions. , 2022, , .  |     | 0         |