

# Pal Varga

## List of Publications by Year in descending order

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Version: 2024-02-01

73  
papers

1,072  
citations

759055

12  
h-index

752573

20  
g-index

77  
all docs

77  
docs citations

77  
times ranked

852  
citing authors

#	ARTICLE	IF	CITATIONS
1	5G support for Industrial IoT Applications” Challenges, Solutions, and Research gaps. Sensors, 2020, 20, 828.	2.1	139
2	Making system of systems interoperable “ The core components of the arrowhead framework. Journal of Network and Computer Applications, 2017, 81, 85-95.	5.8	114
3	Security threats and issues in automation IoT. , 2017, , .		69
4	The arrowhead approach for SOA application development and documentation. , 2014, , .		55
5	Reliable Identification Schemes for Asset and Production Tracking in Industry 4.0. Sensors, 2020, 20, 3709.	2.1	52
6	Positioning in 5G and 6G Networks”A Survey. Sensors, 2022, 22, 4757.	2.1	38
7	Enabling IoT automation using local clouds. , 2016, , .		34
8	Practical 5G KPI Measurement Results on a Non-Standalone Architecture. , 2020, , .		25
9	5G-Enabled Autonomous Driving Demonstration with a V2X Scenario-in-the-Loop Approach. Sensors, 2020, 20, 7344.	2.1	24
10	Secure and trusted inter-cloud communications in the arrowhead framework. , 2018, , .		21
11	3 The Arrowhead Framework architecture. , 2017, , 43-88.		21
12	Optimising maintenance: What are the expectations for Cyber Physical Systems. , 2016, , .		20
13	Enhancements of the Arrowhead Framework to refine inter-cloud service interactions. , 2016, , .		19
14	Translation error handling for multi-protocol SOA systems. , 2015, , .		18
15	Integration of service-level monitoring with fault management for end-to-end multi-provider ethernet services. IEEE Transactions on Network and Service Management, 2007, 4, 28-38.	3.2	17
16	Data-driven Workflow Management by utilising BPMN and CPN in IIoT Systems with the Arrowhead Framework. , 2019, , .		17
17	Dynamic Multilevel Workflow Management Concept for Industrial IoT Systems. IEEE Transactions on Automation Science and Engineering, 2021, 18, 1354-1366.	3.4	17
18	Towards Traffic Identification and Modeling for 5G Application Use-Cases. Electronics (Switzerland), 2020, 9, 640.	1.8	15

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19	Supply Chain Management and Logistics 4.0 - A Study on Arrowhead Framework Integration. , 2019, , .		14
20	A Methodology for the Design of Safety-Compliant and Secure Communication of Autonomous Vehicles. IEEE Access, 2019, 7, 125022-125037.	2.6	14
21	Supporting Digital Production, Product Lifecycle and Supply Chain Management in Industry 4.0 by the Arrowhead Framework â€” a Survey. , 2019, , .		14
22	Motorway Measurement Campaign to Support R&D Activities in the Field of Automated Driving Technologies. Sensors, 2021, 21, 2169.	2.1	14
23	System of Systems Lifecycle Managementâ€”A New Concept Based on Process Engineering Methodologies. Applied Sciences (Switzerland), 2021, 11, 3386.	1.3	14
24	Combining Safety and Security Analysis for Industrial Collaborative Automation Systems. Lecture Notes in Computer Science, 2017, , 187-198.	1.0	13
25	A case study on correlating video QoS and QoE. , 2014, , .		12
26	Detecting DDoS attacks within milliseconds by using FPGA-based hardware acceleration. , 2018, , .		12
27	Security and safety risk analysis of vision guided autonomous vehicles. , 2018, , .		11
28	The MANTIS Architecture for Proactive Maintenance. , 2018, , .		11
29	Proactive Maintenance of Railway Switches. , 2018, , .		11
30	FPGA-Assisted DPI Systems: 100 Gbit/s and Beyond. IEEE Communications Surveys and Tutorials, 2019, 21, 2015-2040.	24.8	11
31	Towards estimating video QoE based on frame loss statistics of the video streams. , 2015, , .		10
32	Real-time security services for SDN-based datacenters. , 2017, , .		10
33	IoT Device Lifecycle â€” A Generic Model and a Use Case for Cellular Mobile Networks. , 2018, , .		9
34	Data-Driven Workflow Execution in Service Oriented IoT Architectures. , 2018, , .		8
35	From Models to Management and Back: Towards a System-of-Systems Engineering Toolchain. , 2020, , .		8
36	C-GEP: 100 Gbit/s capable, FPGA-based, reconfigurable networking equipment. , 2015, , .		7

#	ARTICLE	IF	CITATIONS
37	Organizing IoT Systems-of-Systems from standardized engineering data. , 2016, , .		7
38	Asset and Production Tracking through Value Chains for Industry 4.0 using the Arrowhead Framework. , 2019, , .		7
39	Monitoring of Production Processes and the Condition of the Production Equipment through the Internet. , 2019, , .		7
40	Communication Challenges and Solutions between Heterogeneous Industrial IoT Systems. , 2019, , .		7
41	Improving the Maintenance of Railway Switches through Proactive Approach. Electronics (Switzerland), 2020, 9, 1260.	1.8	7
42	Integrated Infrastructure for Electro Mobility Powered by the Arrowhead Framework. IEEE Access, 2018, 6, 73210-73222.	2.6	6
43	Low-reaction time FPGA-based DDoS detector. , 2018, , .		6
44	C-GEP: Adaptive network management with reconfigurable hardware. , 2015, , .		5
45	Assembling SIP-based VoLTE Call Data Records based on network monitoring. Telecommunication Systems, 2018, 68, 393-407.	1.6	5
46	Distinguishing 5G IoT Use-Cases through Analyzing Signaling Traffic Characteristics. , 2019, , .		5
47	QoS Guarantees for Industrial IoT Applications over LTE - a Feasibility Study. , 2019, , .		5
48	4 Arrowhead Framework core systems and services. , 2017, , 89-138.		5
49	Investigating the network traffic of Industry 4.0 applications â€“ methodology and initial results. , 2020, , .		5
50	Inter-Cloud Communication Through Gatekeepers to Support IoT Service Interaction in the Arrowhead Framework. Wireless Personal Communications, 2017, 96, 3515-3532.	1.8	4
51	Native OPC UA Handling and IEC 61499 PLC Integration within the Arrowhead Framework. , 2020, , .		4
52	A Low Power, Programmable Networking Platform and Development Environment. , 2011, , 19-36.		3
53	A flexible switch-router with reconfigurable forwarding and Linux-based Control Element. , 2012, , .		3
54	Maintenance 4.0 World of Integrated Information. Proceedings of the I-ESA Conference, 2019, , 67-78.	0.4	3

#	ARTICLE	IF	CITATIONS
55	Improving and modeling the performance of a Publish-Subscribe message broker. , 2019, , .		3
56	On the Security Threat of Abandoned and Zombie Cellular IoT Devices. , 2019, , .		3
57	User Group Behavioural Pattern in a Cellular Mobile Network for 5G Use-cases. , 2020, , .		3
58	Achieving Flexible Digital Production with the Arrowhead Workflow Choreographer. , 2020, , .		3
59	LTE core network testing using generated traffic based on models from real-life data. , 2013, , .		2
60	Complex solution for VoLTE monitoring and cross-protocol data analysis. , 2018, , .		2
61	Improving the performance of a Publish-Subscribe message broker. , 2019, , .		2
62	The Pursuit of NB-IoT Transmission Rate Limitations by Real-life Network Measurements. , 2020, , .		2
63	A compact 5G Non-Public Network. , 2021, , .		2
64	Dependability of a Network Monitoring Hardware. , 2010, , .		1
65	Assembling VoLTE CDRs based on network monitoring - challenges with fragmented information. , 2017, , .		1
66	Analyzing group behavior patterns in a cellular mobile network for 5G use-cases. International Journal of Network Management, 0, , e2157.	1.4	1
67	Towards Estimating Quality of Experience with Passive Bottleneck Detection Metrics. , 2007, , 115-125.		1
68	5G public network integration for a real-life PROFINET application. , 2022, , .		1
69	100 Gbit/s network monitoring with on-the-fly reconfigurable rules for multi-encapsulated packets. , 2015, , .		0
70	Network initiated Wi-Fi â€” LTE handovers with multipath TCP. , 2015, , .		0
71	C-GEP: Platform demo for 100 Gbit/s network monitoring. , 2015, , .		0
72	Indexing current advances with DOI â€” at the Infocommunications Journal. Infocommunications Journal, 2019, 11, 1-1.	0.6	0

#	ARTICLE	IF	CITATIONS
73	A Governance Model for Local and Interconnecting Arrowhead Clouds. , 2020, , .		0