# Julian Proenza

List of Publications by Year
in descending order

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| 89 | 568 | 933447 | 839539 |
|---|---|---|---|
| papers | citations | 10 h-index | 18 g-index |

| 91 | 91 | 91 | 286 |
|---|---|---|---|
| all docs | docs citations | times ranked | citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | HERMES: Heuristic Multi-queue Scheduler for TSN Time-Triggered Traffic with Zero Reception Jitter Capabilities. , 2022, , . | | 9 |
| 2 | CSRP: An Enhanced Protocol for Consistent Reservation of Resources in AVB/TSN. IEEE Transactions on Industrial Informatics, 2021, 17, 3640-3650. | 11.3 | 0 |
| 3 | Design and Experimental Evaluation of the Proactive Transmission of Replicated Frames Mechanism over Time-Sensitive Networking. Sensors, 2021, 21, 756. | 3.8 | 8 |
| 4 | Exploring the use of Deep Reinforcement Learning to allocate tasks in Critical Adaptive Distributed Embedded Systems. , 2021, , . | | 2 |
| 5 | LETRA: Mapping Legacy Ethernet-Based Traffic into TSN Traffic Classes. , 2021, , . | | 6 |
| 6 | Reliability Analysis of the Proactive Transmission of Replicated Frames Mechanism over Time-Sensitive Networking. Sensors, 2021, 21, 8427. | 3.8 | 1 |
| 7 | Correction to â€œComparing Admission Control Architectures for Real-Time Ethernetâ€• IEEE Access, 2020, 8, 136260-136260. | 4.2 | 0 |
| 8 | Clock Synchronization in Integrated TSN-EtherCAT Networks. , 2020, , . | | 4 |
| 9 | Comparing Admission Control Architectures for Real-Time Ethernet. IEEE Access, 2020, 8, 105521-105534. | 4.2 | 7 |
| 10 | An Architecture for Highly Reliable Fault-Tolerant Adaptive Distributed Embedded Systems. Computer, 2020, 53, 38-46. | 1.1 | 6 |
| 11 | Analysing Termination and Consistency in the AVBâ€™s Stream Reservation Protocol. , 2019, , . | | 1 |
| 12 | Fault Tolerance in Highly Reliable Ethernet-Based Industrial Systems. Proceedings of the IEEE, 2019, 107, 977-1010. | 21.3 | 15 |
| 13 | A Fault-Tolerant Ethernet for Hard Real-Time Adaptive Systems. IEEE Transactions on Industrial Informatics, 2019, 15, 2980-2991. | 11.3 | 11 |
| 14 | Formal Verification of the FTTRS Mechanisms for the Consistent Update of the Traffic Schedule. , 2019, , . | | 0 |
| 15 | First exploration of the potential of diverse training and voting for increasing the accuracy of CNNs. , 2019, , . | | 0 |
| 16 | Simulation of the Proactive Transmission of Replicated Frames Mechanism over TSN. , 2019, , . | | 7 |
| 17 | Temporal Replication of Messages for Adaptive Systems using a Holistic Approach. , 2019, , . | | 1 |
| 18 | Towards a Fault-Tolerant Architecture Based on Time Sensitive Networking. , 2018, , . | | 3 |

| # | Article | IF | Citations |
|---|---|---|---|
| 19 | Reconfiguration Strategies for Critical Adaptive Distributed Embedded Systems. , 2018, , . | | 4 |
| 20 | Mixing Time and Spatial Redundancy Over Time Sensitive Networking. , 2018, , . | | 4 |
| 21 | Towards a time redundancy mechanism for critical frames in time-sensitive networking. , 2017, , . | | 16 |
| 22 | Towards a dynamic task allocation scheme for highly-reliable adaptive distributed embedded systems. , 2017, , . | | 3 |
| 23 | A first qualitative comparison of the admission control in FTT-SE, HaRTES and AVB. , 2016, , . | | 3 |
| 24 | Guest Editorial Special Section on Communication in Automation. IEEE Transactions on Industrial Informatics, 2016, 12, 1817-1821. | 11.3 | 14 |
| 25 | Improving maintenance of FT4FTT: Extending it to monitor and log its available redundancy via internet. , 2016, , . | | 1 |
| 26 | First implementation and test of reintegration mechanisms for node replicas in the FT4FTT Architecture. , 2016, , . | | 0 |
| 27 | A first performance analysis of the Admission Control in the HaRTES Ethernet switch. , 2016, , . | | 1 |
| 28 | Designing fault-diagnosis and reintegration to prevent node redundancy attrition in highly reliable control systems based on FTT-Ethernet. , 2016, , . | | 5 |
| 29 | First implementation and test of a node replication scheme on top of the flexible time-triggered replicated star for ethernet. , 2016, , . | | 2 |
| 30 | Towards a layered architecture for the Flexible Time-Triggered Replicated Star for Ethernet. , 2015, , . | | 1 |
| 31 | An OMNET++ model to asses node fault-tolerance mechanisms for FTT-Ethernet DESs. , 2015, , . | | 1 |
| 32 | First experimental evaluation of the consistent replicated voting in the hard real-time ethernet switching architecture. , 2015, , . | | 1 |
| 33 | 11th WFCS 2015 on a Mediterranean Island [Society News]. IEEE Industrial Electronics Magazine, 2015, 9, 51-52. | 2.6 | 0 |
| 34 | Quantitative characterization of the reliability of simplex buses and stars to compare their benefits in fieldbuses. Reliability Engineering and System Safety, 2015, 138, 163-175. | 8.9 | 5 |
| 35 | Experimental evaluation of network component crashes and trigger message omissions in the Flexible Time-Triggered Replicated Star for Ethernet. , 2015, , . | | 3 |
| 36 | Towards an experimental assessment of the slave elementary cycle synchronization in the Flexible Time-Triggered Replicated Star for Ethernet. , 2014, , . | | 3 |

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|---|---|---|---|
| 37 | A model for quantifying the reliability of highly-reliable distributed systems based on fieldbus replicated buses. , 2014, , . | | 3 |
| 38 | Towards extending the OMNeT++ INET framework for simulating fault injection in ethernet-based Flexible Time-Triggered systems. , 2014, , . | | 6 |
| 39 | Using FTT-ethernet for the coordinated dispatching of tasks and messages for node replication. , 2014, , . | | 5 |
| 40 | Towards a reliability analysis of the design space for the communication subsystem of FT4FTT. , 2014, , . | | 4 |
| 41 | Achieving elementary cycle synchronization between masters in the flexible time-triggered replicated star for ethernet. , 2014, , . | | 4 |
| 42 | sfiCAN: A Star-Based Physical Fault-Injection Infrastructure for CAN Networks. IEEE Transactions on Vehicular Technology, 2014, 63, 1335-1349. | 6.3 | 10 |
| 43 | A proposal for managing the redundancy provided by the flexible time-triggered replicated star for ethernet. , 2014, , . | | 10 |
| 44 | A proposal for master replica control in the flexible time-triggered replicated star for ethernet. , 2014, , . | | 8 |
| 45 | Appropriate consistent replicated voting for increased reliability in a node replication scheme over FTT. , 2014, , . | | 7 |
| 46 | Using Timed Automata for Modeling Distributed Systems with Clocks: Challenges and Solutions. IEEE Transactions on Software Engineering, 2013, 39, 857-868. | 5.6 | 20 |
| 47 | Towards Efficient Probabilistic Scheduling Guarantees for Real-Time Systems Subject to Random Errors and Random Bursts of Errors. , 2013, , . | | 10 |
| 48 | Towards a Flexible Time-Triggered replicated star for ethernet. , 2013, , . | | 15 |
| 49 | Towards preventing error propagation in a real-time Ethernet switch. , 2013, , . | | 8 |
| 50 | Towards dynamic fault tolerance on FTT-based distributed embedded systems. , 2013, , . | | 1 |
| 51 | Design and Verification of a Media Redundancy Management Driver for a CAN Star Topology. IEEE Transactions on Industrial Informatics, 2013, 9, 237-245. | 11.3 | 8 |
| 52 | A proposal for flexible, real-time and consistent multicast in FTT/HaRTES Switched Ethernet. , 2013, , . | | 7 |
| 53 | Developing TOBE-CAN: Total order broadcast enforcement in CAN. , 2012, , . | | 0 |
| 54 | Probabilistic scheduling guarantees in distributed real-time systems under error bursts. , 2012, , . | | 4 |

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|---|---|---|---|
| 55 | A first qualitative evaluation of star replication schemes for FTT-CAN. , 2012, , . | | 0 |
| 56 | Using FTT and stars to simplify node replication in CAN-based systems. , 2012, , . | | 3 |
| 57 | The design of the CANbids architecture. , 2012, , . | | 16 |
| 58 | Quantitative Comparison of the Error-Containment Capabilities of a Bus and a Star Topology in CAN Networks. IEEE Transactions on Industrial Electronics, 2011, 58, 802-813. | 7.9 | 40 |
| 59 | Towards the integration of flexible-time-triggered communication and replicated star topologies in CAN. , 2011, , . | | 0 |
| 60 | Designing sfiCAN: A star-based physical fault injector for CAN. , 2011, , . | | 1 |
| 61 | Towards understanding the sensitivity of the reliability achievable by simplex and replicated star topologies in CAN. , 2011, , . | | 3 |
| 62 | Injection of aggregated error flags as a means to guarantee consistent error detection in CAN. , 2011, , . | | 3 |
| 63 | Guest Editorial Special Section on Industrial Communication Systems. IEEE Transactions on Industrial Informatics, 2010, 6, 365-368. | 11.3 | 11 |
| 64 | Reliability improvement achievable in CAN-based systems by means of the ReCANcentrate replicated star topology. , 2010, , . | | 7 |
| 65 | First prototype and experimental assessment of media management in ReCANcentrate. , 2010, , . | | 2 |
| 66 | Using Timed Automata for Modeling the Clocks of Distributed Embedded Systems. , 2010, , 172-193. | | 1 |
| 67 | Demonstrating the feasibility of media management in ReCANcentrate. , 2009, , . | | 1 |
| 68 | First quantitative results of the dependability improvement achieved by ReCANcentrate. , 2009, , . | | 1 |
| 69 | A first design for CANsistant: A mechanism to prevent inconsistent omissions in CAN in the presence of multiple errors. , 2009, , . | | 4 |
| 70 | Boosting the Robustness of Controller Area Networks: CANcentrate and ReCANcentrate. Computer, 2009, 42, 66-73. | 1.1 | 13 |
| 71 | Managing redundancy in CAN-based networks supporting N-Version Programming. Computer Standards and Interfaces, 2009, 31, 120-127. | 5.4 | 5 |
| 72 | Analytical Assessment of the Precision Degradation Caused by Faults in a Fault-Tolerant Master/Slave Clock Synchronization Service for CAN. , 2008, , . | | 0 |

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|---|---|---|---|
| 73 | Maintaining data consistency in ReCANcentrate during hub decouplings. , 2008, , . | | 0 |
| 74 | Orthogonal, Fault-Tolerant, and High-Precision Clock Synchronization for the Controller Area Network. IEEE Transactions on Industrial Informatics, 2008, 4, 92-101. | 11.3 | 31 |
| 75 | Designing and verifying media management in ReCANcentrate. , 2008, , . | | 4 |
| 76 | Dependable Automotive CAN Networks. Industrial Information Technology Series, 2008, , 130-181. | 0.2 | 5 |
| 77 | Modelling MajorCAN with UPPAAL. , 2007, , . | | 2 |
| 78 | Modeling and Verification of Master/Slave Clock Synchronization Using Hybrid Automata and Model-Checking. Lecture Notes in Computer Science, 2007, , 307-326. | 1.3 | 1 |
| 79 | An Active Star Topology for Improving Fault Confinement in CAN Networks. IEEE Transactions on Industrial Informatics, 2006, 2, 78-85. | 11.3 | 57 |
| 80 | Experimental Assessment of ReCANcentrate, a Replicated Star Topology for CAN. , 2006, , . | | 4 |
| 81 | Combining Operational Flexibility and Dependability in FTT-CAN. IEEE Transactions on Industrial Informatics, 2006, 2, 95-102. | 11.3 | 36 |
| 82 | Hardware design of a high-precision and fault-tolerant clock subsystem for CAN networks. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2003, 36, 39-46. | 0.4 | 8 |
| 83 | Analyzing atomic broadcast in TTCAN networks. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2003, 36, 147-150. | 0.4 | 2 |
| 84 | A low-cost fail-safe circuit for fault-tolerant control systems. , 0, , . | | 4 |
| 85 | A cost-effective hardware architecture for fail-safe autonomous underwater vehicles. , 0, , . | | 3 |
| 86 | Hardware support for fault tolerance in triple redundant CAN controllers. , 0, , . | | 8 |
| 87 | Design and implementation of a redundancy manager for triple redundant CAN controllers. , 0, , . | | 3 |
| 88 | An architecture for physical injection of complex fault scenarios in CAN networks. , 0, , . | | 11 |
| 89 | COTS-based hardware support to timeliness in CAN networks. , 0, , . | | 0 |