Publication list

Alessandro Vittorio Papadopoulos
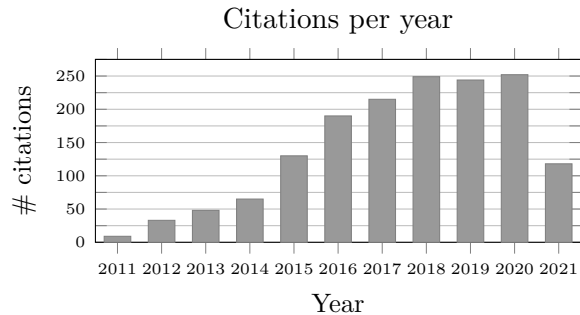
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Citation summary

Source: Google scholar (30/06/2021)

- Number of citations: 1607

- h-index: 21

- i10-index: 38

- i100-index: 4

- g-index: 36

Citations per year

Books and book chapters

[B6]   V. Gulisano, M. Papatriantafilou, and A. V. Papadopoulos. "Elasticity". In: *Encyclopedia of Big Data Technologies (2nd edition)*. Ed. by S. Sakr and A. Y. Zomaya. Cham: Springer International Publishing, 2020.

[B5]   A. V. Papadopoulos and M. Prandini. *Fondamenti di Automatica: Esercizi (2 Edizione)*. (In Italian). Pearson Italia, 2020.

[B4]   V. Gulisano, M. Papatriantafilou, and A. V. Papadopoulos. "Elasticity". In: *Encyclopedia of Big Data Technologies*. Ed. by S. Sakr and A. Y. Zomaya. Cham: Springer International Publishing, 2019, pp. 1–7. DOI: 10.1007/978-3-319-63962-8_191-1.

[B3]   M. Maggio, T. Abdelzaher, L. Esterle, H. Giese, J. O. Kephart, O. J. Mengshoel, A. V. Papadopoulos, A. Robertsson, and K. Wolter. "Self-adaptation for Individual Self-aware Computing Systems". In: *Self-Aware Computing Systems*. Ed. by S. Kounev, J. O. Kephart, A. Milenkoski, and X. Zhu. Cham: Springer International Publishing, 2017, pp. 375–399. DOI: 10.1007/978-3-319-47474-8_12.

[B2]   A. V. Papadopoulos and M. Prandini. *Fondamenti di Automatica: Esercizi*. (In Italian). Pearson Italia, 2016.

[B1]   A. Leva, M. Maggio, A. V. Papadopoulos, and F. Terraneo. *Control-based operating system design*. Control Engineering Series. IET, 2013. DOI: 10.1049/PBCE089E.

International Journals

[J29]   I. Ayala, A. V. Papadopoulos, M. Amor, and L. Fuentes. "ProDSPL: Proactive Self-Adaptation based on Dynamic Software ProductLines". In: *Journal of Systems and Software* 175.110909 (2021). DOI: 10.1016/j.jss.2021.110909.

[J28]   B. Miloradović, B. Çürüklü, M. Ekström, and A. V. Papadopoulos. "GMP: A Genetic Mission Planner for Heterogeneous Multi-Robot System Applications". In: *IEEE Transactions on Cybernetics* (2021). DOI: 10.1109/TCYB.2021.3070913.

[J27] S. M. Salman, A. V. Papadopoulos, S. Mubeen, and T. Nolte. "A Systematic Methodology to Migrate Complex Real-Time Software Systems to Multi-Core Platforms". In: *Journal of Systems Architecture* 117.102087 (2021). DOI: 10.1016/j.sysarc.2021.102087.

[J26] W. Wang, D. Mosse, and A. V. Papadopoulos. "Packet Priority Assignment for Wireless Control Systems of Multiple Physical Systems". In: *Journal of Systems Architecture* 107 (2020), p. 101708. DOI: 10.1016/j.sysarc.2020.101708.

[J25] D. Ioli, A. Falsone, A. V. Papadopoulos, and M. Prandini. "A compositional modeling framework for the optimal energy management of a district network". In: *Journal of Process Control* 74 (2019), pp. 160–176. DOI: 10.1016/j.jprocont.2017.10.005.

[J24] A. Leva, A. V. Papadopoulos, S. Seva, and C. Cimino. "Explicit model-based real PID tuning for efficient load disturbance rejection". In: *Industrial & Engineering Chemistry Research* 58.51 (2019), pp. 23211–23224. DOI: 10.1021/acs.iecr.9b04198.

[J23] A. V. Papadopoulos, L. Versluis, A. Bauer, N. Herbst, J. von Kistowski, A. Ali-Eldin, C. L. Abad, J. N. Amaral, P. Tůma, and A. Iosup. "Methodological Principles for Reproducible Performance Evaluation in Cloud Computing". In: *IEEE Transactions on Software Engineering* (2019). Selected as Journal-First publication presented at ICSE 2020. DOI: 10.1109/TSE. 2019.2927908.

[J22] K. Angelopoulos, A. V. Papadopoulos, V. E. S. Souza, and J. Mylopoulos. "Engineering Self-Adaptive Software Systems: From Requirements to Model Predictive Control". In: *ACM Transactions on Autonomous and Adaptive Systems* 13.1 (2018), 1:1–1:27. DOI: 10.1145/3105748.

[J21] A. Ilyushkin, A. Ali-Eldin, N. Herbst, A. Bauer, A. V. Papadopoulos, D. Epema, and A. Iosup. "An Experimental Performance Evaluation of Autoscalers for Complex Workflows". In: *ACM Transactions on Modeling and Performance Evaluation of Computing Systems (TOMPECS)* 3.2 (2018), 8:1–8:32. DOI: 10.1145/3164537.

[J20] S. Mubeen, S. Abbaspour Asadollah, A. V. Papadopoulos, M. Ashjaei, H. Pei-Breivold, and M. Behnam. "Management of Service Level Agreements for Cloud Services in IoT: A Systematic Mapping Study". In: *IEEE Access* 6.1 (2018), pp. 30184–30207. DOI: 10.1109/ACCESS.2017. 2744677.

[J19] A. V. Papadopoulos, F. Terraneo, A. Leva, and M. Prandini. "Switched control for quantized feedback systems: invariance and limit cycles analysis". In: *IEEE Transactions on Automatic Control* 63.11 (2018), pp. 3775–3786. DOI: 10.1109/TAC.2018.2797246.

[J18] F. Terraneo, A. V. Papadopoulos, A. Leva, and M. Prandini. "FLOPSYNC-QACS: Quantization-aware Clock Synchronization for Wireless Sensor Networks". In: *SIGBED Rev.* 14.4 (2018), pp. 33–38. DOI: 10.1145/3177803.3177809.

[J17] A. Filieri, M. Maggio, K. Angelopoulos, N. D'Ippolito, I. Gerostathopoulos, A. B. Hempel, H. Hoffmann, P. Jamshidi, E. Kalyvianaki, C. Klein, F. Krikava, S. Misailovic, A. V. Papadopoulos, S. Ray, A. M. Sharifloo, S. Shevtsov, M. Ujma, and T. Vogel. "Control Strategies for Self-Adaptive Software Systems". In: *ACM Transactions on Autonomous and Adaptive Systems* 11.4 (Feb. 2017), 24:1–24:31. DOI: 10.1145/3024188.

[J16] F. Terraneo, A. V. Papadopoulos, A. Leva, and M. Prandini. "FLOPSYNC-QACS: Quantization-Aware Clock Synchronization for Wireless Sensor Networks". In: *Journal of Systems Architecture* 80 (2017), pp. 77–84. DOI: 10.1016/j.sysarc.2017.09.006.

[J15] A. Leva, F. Terraneo, L. Rinaldi, A. V. Papadopoulos, and M. Maggio. "High-Precision Low-Power Wireless Nodes' Synchronization via Decentralized Control". In: *IEEE Transactions on Control Systems Technology* 24.4 (2016), pp. 1279–1293. DOI: 10.1109/TCST.2015.2483559.

[J14] A. V. Papadopoulos, A. Ali-Eldin, K.-E. Årzén, J. Tordsson, and E. Elmroth. "PEAS: A Performance Evaluation Framework for Auto-Scaling Strategies in Cloud Applications". In: *ACM Transactions on Modeling and Performance Evaluation of Computing Systems (TOMPECS)* 1.4 (2016), 15:1–15:31. DOI: 10.1145/2930659.

[J13]   A. V. Papadopoulos, L. Bascetta, and G. Ferretti. "Generation of Human Walking Paths". In: *Autonomous Robots* 40.1 (2016), pp. 59–75. DOI: 10.1007/s10514-015-9443-2.

[J12]   A. V. Papadopoulos, C. Klein, M. Maggio, J. Dürango, M. Dellkrantz, F. Hernández-Rodriguez, E. Elmroth, and K.-E. Årzén. "Control-Based Load-Balancing Techniques: Analysis and Performance Evaluation via a Randomized Optimization Approach". In: *Control Engineering Practice* 52 (2016), pp. 24–34. DOI: 10.1016/j.conengprac.2016.03.020.

[J11]   A. V. Papadopoulos and M. Prandini. "Model reduction of switched affine systems". In: *Automatica* 70 (2016), pp. 57–65. DOI: 10.1016/j.automatica.2016.03.019.

[J10]   A. V. Papadopoulos and A. Leva. "A model partitioning method based on dynamic decoupling for the efficient simulation of multibody systems". In: *Multibody System Dynamics* 34.2 (2015), pp. 163–190. DOI: 10.1007/s11044-014-9415-x.

[J9]   A. V. Papadopoulos, M. Maggio, A. Leva, and E. Bini. "Hard Real-Time Guarantees in Feedback-based Resource Reservations". In: *Real-Time Systems* 51.3 (2015), pp. 221–246. DOI: 10.1007/s11241-015-9224-1.

[J8]   A. V. Papadopoulos, M. Maggio, F. Terraneo, and A. Leva. "A Dynamic Modelling Framework for Control-based Computing System Design". In: *Mathematical and Computer Modelling of Dynamical Systems* 21.3 (2015). (invited paper), pp. 251–271. DOI: 10.1080/13873954.2014.942785.

[J7]   A. V. Papadopoulos and A. Leva. "Automating efficiency-targeted approximations in modelling and simulation tools: dynamic decoupling and mixed-mode integration". In: *SIMULATION: Transactions of The Society for Modeling and Simulation International* 90.10 (2014), pp. 1158–1176. DOI: 10.1177/0037549714547296.

[J6]   F. Dercole, M. De Carli, F. Della Rossa, and A. V. Papadopoulos. "Overpunishing is not necessary to fix cooperation in voluntary public goods games". In: *Journal of Theoretical Biology* 326.0 (2013), pp. 70–81. DOI: 10.1016/j.jtbi.2012.11.034.

[J5]   A. Leva and A. V. Papadopoulos. "Tuning of event-based industrial controllers with simple stability guarantees". In: *Journal of Process Control* 23.9 (2013), pp. 1251–1260. DOI: 10.1016/j.jprocont.2013.07.010.

[J4]   M. Maggio, A. V. Papadopoulos, and A. Leva. "On the Use of Feedback Control in the Design of Computing System Components". In: *Asian Journal of Control* 15.1 (2013). (invited paper), pp. 31–40. DOI: 10.1002/asjc.509.

[J3]   M. Maggio, H. Hoffmann, A. V. Papadopoulos, J. Panerati, M. D. Santambrogio, A. Agarwal, and A. Leva. "Comparison of Decision Making Strategies for Self-Optimization in Autonomic Computing Systems". In: *ACM Transactions on Autonomous and Adaptive Systems* 7.4 (2012), 36:1–36:32. DOI: 10.1145/2382570.2382572.

[J2]   A. V. Papadopoulos, M. Maggio, S. Negro, and A. Leva. "General control-theoretical framework for online resource allocation in computing systems". In: *IET Control Theory & Applications* 6.11 (2012), pp. 1594–1602. DOI: 10.1049/iet-cta.2011.0632.

[J1]   A. Leva, S. Negro, and A. V. Papadopoulos. "PI/PID autotuning with contextual model parametrisation". In: *Journal of Process Control* 20.4 (2010), pp. 452–463. DOI: 10.1016/j.jprocont.2010.01.005.

International Conferences

[C82]   A. Al-Dulaimy, J. Taheri, A. V. Papadopoulos, and T. Nolte. "LOOPS: A Holistic Control Approach for Resource Management in Cloud Computing". In: *12th ACM/SPEC International Conference on Performance Engineering (ICPE)*. Rennes, France: Association for Computing Machinery, 2021, pp. 117–124. DOI: 10.1145/3427921.3450254.

[C81] I. Ayala, M. Amor, L. Fuentes, and A. V. Papadopoulos. "Self-adapting Industrial Augmented Reality applications with proactive Dynamic Software Product Lines". In: *26th IEEE Conference on Emerging Technologies and Factory Automation (ETFA)*. (accepted). Västerås, Sweden, 2021.

[C80] I. Ayala, A. V. Papadopoulos, M. Amor, and L. Fuentes. "Extended Abstract: ProDSPL: Proactive Self-Adaptation based on Dynamic Software ProductLines". In: *25th ACM International Systems and Software Product Line Conference (SPLC) – Journal First Track*. (accepted). Leicester, United Kingdom, 2021.

[C79] D. Bujosa Mateu, M. Ashjaei, A. V. Papadopoulos, J. Proenza, and T. Nolte. "Mapping Legacy Ethernet-Based Traffic into TSN Traffic Classes". In: *26th IEEE Conference on Emerging Technologies and Factory Automation (ETFA)*. (accepted). Västerås, Sweden, 2021.

[C78] M. Frasheri, L. Esterle, and A. V. Papadopoulos. "Cooperative Multi-Agent Systems for the Multi-Target κ-Coverage Problem". In: *Agents and Artificial Intelligence*. Ed. by A. P. Rocha, L. Steels, and J. van den Herik. Cham: Springer International Publishing, 2021, pp. 106–131. DOI: 10.1007/978-3-030-71158-0_5.

[C77] A. Friebe, F. Marković, A. V. Papadopoulos, and T. Nolte. "Adaptive Runtime Estimate of Task Execution Times using Bayesian Modeling". In: *27th IEEE International Conference on Embedded and Real-Time Computing Systems and Applications (RTCSA)*. (accepted). Gangneung, South Korea, 2021.

[C76] F. Marković, A. V. Papadopoulos, and T. Nolte. "On the Convolution Efficiency for Probabilistic Analysis of Real-Time Systems". In: *33rd Euromicro Conference on Real-Time Systems (ECRTS)*. Ed. by B. B. Brandenburg. Vol. 196. Leibniz International Proceedings in Informatics (LIPIcs). Virtual Conference: Schloss Dagstuhl – Leibniz-Zentrum für Informatik, 2021, 16:1–16:22. DOI: 10.4230/LIPIcs.ECRTS.2021.16. **Outstanding paper award**. Acceptance rate: 19%.

[C75] B. Miloradović, B. Çürüklü, M. Ekström, and A. V. Papadopoulos. "Exploiting Parallelism in Multi-Task Robot Allocation Problems". In: *21st IEEE International Conference on Autonomous Robot Systems and Competitions (ICARSC)*. Santa Maria da Feira, Portugal, 2021, pp. 197–202. DOI: 10.1109/ICARSC52212.2021.9429814.

[C74] N. Persson, T. Andersson, A. Fattouh, M. C. Ekström, and A. V. Papadopoulos. "A Comparative Analysis and Design of Controllers for Autonomous Bicycles". In: *European Control Conference (ECC)*. (accepted). Rotterdam, The Netherlands, 2021.

[C73] N. Persson, M. C. Ekström, M. Ekström, and A. V. Papadopoulos. "Trajectory tracking and stabilisation of a riderless bicycle". In: *24th IEEE International Conference on Intelligent Transportation (ITSC)*. (accepted). Indianapolis, IN, USA, 2021.

[C72] S. M. Salman, S. Mubeen, A. V. Papadopoulos, and T. Nolte. "Scheduling Elastic Applications in Compositional Real-Time Systems". In: *26th IEEE Conference on Emerging Technologies and Factory Automation (ETFA)*. (accepted). Västerås, Sweden, 2021.

[C71] V. Struhár, S. S. Craciunas, M. Ashjaei, M. Behnam, and A. V. Papadopoulos. "REACT: Enabling Real-Time Container Orchestration". In: *26th IEEE Conference on Emerging Technologies and Factory Automation (ETFA)*. (accepted). Västerås, Sweden, 2021.

[C70] D. Bujosa Mateu, D. Hallmans, M. Ashjaei, A. V. Papadopoulos, J. Proenza, and T. Nolte. "Clock Synchronization in Integrated TSN-EtherCAT Networks". In: *25th IEEE Conference on Emerging Technologies and Factory Automation (ETFA)*. Vol. 1. Vienna, Austria, 2020, pp. 214–221. DOI: 10.1109/ETFA46521.2020.9212153.

[C69] J. Cámara, A. V. Papadopoulos, D. Weyns, T. Vogel, D. Garlan, S. Huang, and K. Tei. "Towards Bridging the Gap between Control and Self-Adaptive System Properties". In: *15th International Symposium on Software Engineering for Adaptive and Self-Managing Systems (SEAMS)*. Seoul, Republic of Korea: ACM, 2020, pp. 78–84. DOI: 10.1145/3387939.3391568.

[C68] M. Frasheri, J. Cano-Garcia, E. Gonzalez-Parada, B. Çürüklü, M. Ekström, A. V. Papadopoulos, and C. Urdiales. "Adaptive Autonomy in Wireless Sensor Networks". In: *Proceedings of the 19th International Conference on Autonomous Agents and MultiAgent Systems (AAMAS)*. Auckland, New Zealand: International Foundation for Autonomous Agents and Multiagent Systems, 2020, pp. 375–383. DOI: 10.5555/3398761.3398809. Acceptance rate: 23%.

[C67] M. Frasheri, L. Esterle, and A. V. Papadopoulos. "Modeling the Willingness to Interact in Cooperative Multi-Robot Systems". In: *Proceedings of the 12th International Conference on Agents and Artificial Intelligence (ICAART)*. Vol. 1. INSTICC. Valletta, Malta: SciTePress, 2020, pp. 62–72. DOI: 10.5220/0008951900620072.

[C66] A. Friebe, A. V. Papadopoulos, and T. Nolte. "Identification and Validation of Markov Models with Continuous Emission Distributions for Execution Times". In: *26th IEEE International Conference on Embedded and Real-Time Computing Systems and Applications (RTCSA)*. Gangneung, South Korea, 2020. DOI: 10.1109/RTCSA50079.2020.9203594.

[C65] B. Johansson, M. Rågberger, A. V. Papadopoulos, and T. Nolte. "Heartbeat Bully: Failure Detection and Redundancy Role Selection for Network-Centric Controller". In: *46th Annual Conference of the IEEE Industrial Electronics Society (IECON)*. Singapore, 2020, pp. 2126–2133. DOI: 10.1109/IECON43393.2020.9254494.

[C64] A. Lager, G. Spampinato, A. V. Papadopoulos, and T. Nolte. "IoT and Fog Analytics for Industrial Robot Applications". In: *25th IEEE Conference on Emerging Technologies and Factory Automation (ETFA)*. Vol. 1. Vienna, Austria, 2020, pp. 1297–1300. DOI: 10.1109/ETFA46521.2020.9212065.

[C63] A. Leva, S. Seva, F. Terraneo, A. V. Papadopoulos, and M. Maggio. "How control-friendly is a computing system? And how control-friendly could it be?" In: *Proceedings of the 21st IFAC World Congress (IFAC WC)*. Vol. 53. 2. Berlin, Germany: IFAC, 2020, pp. 7857–7864. DOI: 10.1016/j.ifacol.2020.12.1962.

[C62] B. Miloradović, B. Çürüklü, M. Ekström, and A. V. Papadopoulos. "A Genetic Algorithm Approach to Multi-Agent Mission Planning Problems". In: *Operations Research and Enterprise Systems*. Ed. by G. H. Parlier, F. Liberatore, and M. Demange. Cham: Springer International Publishing, 2020, pp. 109–134. DOI: 10.1007/978-3-030-37584-3_6.

[C61] A. V. Papadopoulos, L. Versluis, A. Bauer, N. Herbst, J. von Kistowski, A. Ali-Eldin, C. L. Abad, J. N. Amaral, P. Tůma, and A. Iosup. "Methodological Principles for Reproducible Performance Evaluation in Cloud Computing". In: *Software Engineering, Fachtagung des GI-Fachbereichs Softwaretechnik*. Ed. by M. Felderer, W. Hasselbring, R. Rabiser, and R. Jung. Vol. P-300. LNI. Innsbruck, Austria: Gesellschaft für Informatik e.V., 2020, pp. 93–94. DOI: 10.18420/SE2020_27.

[C60] S. M. Salman, T. Akbar Sitompul, A. V. Papadopoulos, and T. Nolte. "Fog Computing for Augmented Reality: Trends, Challenges and Opportunities". In: *IEEE International Conference on Fog Computing (ICFC)*. Sydney, Australia, 2020, pp. 56–63. DOI: 10.1109/ICFC49376.2020.00017.

[C59] S. M. Salman, A. V. Papadopoulos, S. Mubeen, and T. Nolte. "A Systematic Migration Methodology for Complex Real-time Software Systems". In: *23rd IEEE International Symposium on Real-Time Distributed Computing (ISORC)*. Nashville, TN, USA, 2020, pp. 192–200. DOI: 10.1109/ISORC49007.2020.00041.

[C58] S. M. Salman, V. Struhár, Z. Bakhshi, V.-L. Dao, N. Desai, A. V. Papadopoulos, T. Nolte, V. Karagiannis, S. Schulte, A. Venito, and G. Fohler. "Enabling Fog-based Industrial Robotics Systems". In: *25th IEEE Conference on Emerging Technologies and Factory Automation (ETFA)*. Vol. 1. Vienna, Austria, 2020, pp. 61–68. DOI: 10.1109/ETFA46521.2020.9211887.

[C57] A. Friebe, A. V. Papadopoulos, and T. Nolte. "Work-In-Progress: Validation of Probabilistic Timing Models of a Periodic Task with Interference – A Case Study". In: *40th IEEE Real-Time Systems Symposium (RTSS)*. Hong Kong, China, 2019, pp. 524–527. DOI: 10.1109/RTSS46320.2019.00055.

[C56] B. Johansson, B. Leander, A. Čaušević, A. V. Papadopoulos, and T. Nolte. "Classification of PROFINET I/O Configurations utilizing Neural Networks". In: *24th IEEE Conference on Emerging Technologies and Factory Automation (ETFA)*. Zaragoza, Spain, 2019, pp. 1321–1324. DOI: 10.1109/ETFA.2019.8869024.

[C55] B. Johansson, A. V. Papadopoulos, and T. Nolte. "Concurrency defect localization in embedded systems using static code analysis: An Evaluation". In: *30th International Symposium on Software Reliability Engineering (ISSRE)*. Berlin, Germany, 2019, pp. 7–12. DOI: 10.1109/ISSREW.2019.00034. (**Best industrial paper award candidate**).

[C54] A. Lager, G. Spampinato, A. V. Papadopoulos, and T. Nolte. "Towards Reactive Robot Applications in Dynamic Environments". In: *24th IEEE Conference on Emerging Technologies and Factory Automation (ETFA)*. Zaragoza, Spain, 2019, pp. 1603–1606. DOI: 10.1109/ETFA.2019.8868963.

[C53] B. Miloradović, B. Cürüklü, M. Ekström, and A. V. Papadopoulos. "Extended Colored Traveling Salesperson for Modeling Multi-Agent Mission Planning Problems". In: *International Conference on Operations Research and Enterprise Systems (ICORES)*. INSTICC. Prague, Czech Republic, 2019, pp. 237–244. DOI: 10.5220/0007309002370244.

[C52] B. Miloradović, M. Frasheri, B. Cürüklü, M. Ekström, and A. V. Papadopoulos. "TAMER: Task Allocation in Multi-Robot Systems Through an Entity-Relationship Model". In: *Principles and Practice of Multi-Agent Systems (PRIMA)*. Ed. by M. Baldoni, M. Dastani, B. Liao, Y. Sakurai, and R. Zalila Wenkstern. Turin, Italy: Springer International Publishing, 2019, pp. 478–486. DOI: 10.1007/978-3-030-33792-6_32.

[C51] J. Relefors, M. Momeni, L. Petterson, E. Hellström, A. Thunell, A. V. Papadopoulos, and T. Nolte. "Towards Automated Installation of Reinforcement Using Industrial Robots". In: *24th IEEE Conference on Emerging Technologies and Factory Automation (ETFA)*. Zaragoza, Spain, 2019, pp. 1595–1598. DOI: 10.1109/ETFA.2019.8869343.

[C50] V. Struhár, M. Ashjaei, M. Behnam, S. S. Craciunas, and A. V. Papadopoulos. "DART: Dynamic Bandwidth Distribution Framework for Virtualized Software Defined Networks". In: *45th Annual Conference of the IEEE Industrial Electronics Society (IECON)*. Vol. 1. Lisbon, Portugal, 2019, pp. 2934–2939. DOI: 10.1109/IECON.2019.8927780.

[C49] J. Thörn, N. Vidimlic, A. Friebe, A. V. Papadopoulos, and T. Nolte. "Timing analysis of a periodic task on a microcontroller". In: *24th IEEE Conference on Emerging Technologies and Factory Automation (ETFA)*. Zaragoza, Spain, 2019, pp. 1419–1422. DOI: 10.1109/ETFA.2019.8869210.

[C48] A. Čaušević, A. V. Papadopoulos, and M. Sirjani. "Towards a Framework for Safe and Secure Adaptive Collaborative Systems". In: *2019 IEEE 43rd Annual Computer Software and Applications Conference (COMPSAC)*. Vol. 2. Milwaukee, Wisconsin, USA, 2019, pp. 165–170. DOI: 10.1109/COMPSAC.2019.10201.

[C47] W. Wang, D. Mosse, and A. V. Papadopoulos. "Packet Priority Assignment for Wireless Control Systems of Multiple Physical Systems". In: *22nd IEEE International Symposium on Real-Time Distributed Computing (ISORC)*. Valencia, Spain, 2019, pp. 143–150. DOI: 10.1109/ISORC.2019.00036.

[C46] H. R. Faragardi, S. Dehnavi, M. Kargahi, A. V. Papadopoulos, and T. Nolte. "A Time-Predictable Fog-Integrated Cloud Framework: One Step Forward in the Deployment of a Smart Factory". In: *The CSI International Symposium on Real-Time and Embedded Systems and Technologies (RTEST)*. Teheran, Iran, 2018, pp. 54–62. DOI: 10.1109/RTEST.2018.8397079.

[C45] M. Frasheri, B. Cürüklü, M. Ekström, and A. V. Papadopoulos. "Adaptive Autonomy in a Search and Rescue Scenario". In: *Proceedings of the 12th IEEE International Conference on Self-Adaptive and Self-Organizing Systems*. Trento, Italy, 2018, pp. 150–155. DOI: 10.1109/SASO.2018.00026.

[C44] A. Leva, S. Seva, and A. V. Papadopoulos. "Progress Rate Control for Computer Applications". In: *European Control Conference (ECC)*. Limassol, Cyprus, 2018, pp. 3173–3178. DOI: 10.23919/ECC.2018.8550414.

[C43] A. V. Papadopoulos, E. Bini, S. Baruah, and A. Burns. "AdaptMC: A Control-Theoretic Approach for Achieving Resilience in Mixed-Criticality Systems". In: *30th Euromicro Conference on Real-Time Systems (ECRTS)*. Ed. by S. Altmeyer. Vol. 106. Leibniz International Proceedings in Informatics (LIPIcs). Barcelona, Spain: Schloss Dagstuhl–Leibniz-Zentrum fuer Informatik, 2018, 14:1–14:22. DOI: 10.4230/LIPIcs.ECRTS.2018.14. URL: http://drops.dagstuhl.de/opus/volltexte/2018/8989. Acceptance rate: 33%.

[C42] A. V. Papadopoulos and M. Maggio. "Challenges in High Performance Big Data Frameworks". In: *2018 International Conference on High Performance Computing Simulation (HPCS)*. AHPC. Orléans, France, 2018, pp. 153–156. DOI: 10.1109/HPCS.2018.00039.

[C41] A. Souza, A. V. Papadopoulos, L. Tomás Bolivar, D. Gilbert, and J. Tordsson. "Hybrid Adaptive Checkpointing for Virtual Machine Fault Tolerance". In: *IEEE International Conference on Cloud Engineering (IC2E)*. Orlando, Florida, USA, 2018, pp. 12–22. DOI: 10.1109/IC2E.2018.00023. Acceptance rate: 19%. (**Best paper award candidate**).

[C40] V. Struhár, A. V. Papadopoulos, and M. Behnam. "Fog Computing for Adaptive Human-robot Collaboration: Work-in-progress". In: *Proceedings of the International Conference on Embedded Software (EMSOFT)*. Turin, Italy: IEEE Press, 2018, 14:1–14:2. URL: http://dl.acm.org/citation.cfm?id=3283535.3283549.

[C39] V. Gulisano, A. V. Papadopoulos, Y. Nikolakopoulos, M. Papatriantafilou, and P. Tsigas. "Performance modeling of stream joins". In: *Proceedings of the 11th ACM International Conference on Distributed and Event-based Systems (DEBS)*. Barcelona, Spain: ACM, 2017, pp. 191–202. DOI: 10.1145/3093742.3093923. Acceptance rate: 24%.

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[W8]   V. Struhár, M. Behnam, M. Ashjaei, and A. V. Papadopoulos. "Real-Time Containers: A Survey". In: *2nd Workshop on Fog Computing and the IoT (Fog-IoT)*. Ed. by A. Cervin and Y. Yang. Vol. 80. OpenAccess Series in Informatics (OASIcs). Sydney, Australia: Schloss Dagstuhl–Leibniz-Zentrum fuer Informatik, 2020, 7:1–7:9. DOI: `10.4230/OASIcs.Fog-IoT.2020.7`. URL: `https://drops.dagstuhl.de/opus/volltexte/2020/12001`.

[W7]   S. M. Salman, V. Struhár, A. V. Papadopoulos, M. Behnam, and T. Nolte. "Fogification of Industrial Robotic Systems: Research Challenges". In: *Proceedings of the Workshop on Fog Computing and the IoT (Fog-IoT)*. Montreal, Quebec, Canada: ACM, 2019, pp. 41–45. DOI: `10.1145/3313150.3313225`.

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[W1] M. Maggio, A. V. Papadopoulos, and A. Leva. "SMART Computing Systems: Sensing, Modelling, Actuating, Regulating, and Tuning". In: *Proceedings of the 7th International Workshop on Feedback Computing*. San Jose, CA, USA, 2012.

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[P2] A. V. Papadopoulos and A. Biondi, eds. *Front Matter - ECRTS 2020 Artifacts, Table of Contents, Preface, Artifact Evaluation Committee*. Vol. 6. Dagstuhl Artifacts Series 1. Dagstuhl, Germany: Schloss Dagstuhl–Leibniz-Zentrum für Informatik, 2020, 0:i–0:x. DOI: `10.4230/DARTS.6.1.0`. URL: `https://drops.dagstuhl.de/opus/volltexte/2020/12390`.

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[T1] A. V. Papadopoulos, L. Versluis, A. Bauer, N. Herbst, J. von Kistowski, A. Ali-Eldin, C. L. Abad, J. N. Amaral, P. Tůma, and A. Iosup. *Methodological Principles for Reproducible Performance Evaluation in Cloud Computing*. Tech. rep. SPEC-RG-2019-03. SPEC, 2019. URL: `https://research.spec.org/news/single-view/article/technical-report-on-reproducible-performance-evaluation-in-cloud-computing-published.html`.

Software Artifacts

[A3] F. Marković, A. V. Papadopoulos, and T. Nolte. "On the Convolution Efficiency for Probabilistic Analysis of Real-Time Systems (Artifact)". In: *Dagstuhl Artifacts Series* 7.1 (2021). Ed. by F. Marković, A. V. Papadopoulos, and T. Nolte, 1:1–1:2. DOI: `10.4230/DARTS.7.1.1`. URL: `https://drops.dagstuhl.de/opus/volltexte/2021/13980`.

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[O1] A. V. Papadopoulos and M. Maggio. *Autonomous Computing Systems: The Convergence of Control Theory and Computing Systems*. IEEE Software Blog. 2019. URL: http://blog.ieeesoftware.org/2019/07/autonomous-computing-systems.html.

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[SJ2] M. Frasheri, V. Struhár, A. V. Papadopoulos, and A. Čaušević. "Ethics of Autonomous Collective Decision-Making: the CAESAR Framework". In: *Science and Engineering Ethics* (2020). (submitted under review).

[SJ1] M. Momeni, J. Relefors, A. Khatry, L. Pettersson, A. V. Papadopoulos, and T. Nolte. "Automated Fabrication of Reinforcement Cages Using a Virtual Robotized Production Cell". In: *Automation in Construction* (2020). (submitted under review).

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[SC4] R. Caldas, R. Ghzouli, A. V. Papadopoulos, P. Pelliccione, D. Weyns, and T. Berger. "Towards Mapping Control Theory and Software Engineering Properties using Specification Patterns". In: *IEEE International Conference on Autonomic Computing and Self-Organizing Systems (ACSOS)*. (submitted under review). 2021.

[SC3] B. Johansson, M. Rågberger, T. Nolte, and A. V. Papadopoulos. "Kuberenetes orchestration of high availability distributed control systems". In: *47th Annual Conference of the IEEE Industrial Electronics Society (IECON)*. (submitted under review). 2021.

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[SC1] M. Shamseddine, A. Al-Dulaimy, W. Itani, T. Nolte, and A. V. Papadopoulos. "NodeGuard: Virtualized Introspection Security Approach for the Modern Cloud Data Center". In: *International Symposium on Algorithmic Aspects of Cloud Computing (ALGOCLOUD)*. (submitted under review). 2021.