Bibliography

[1] Anil Kumar Inkulu, MVA Raju Bahubalendruni, Ashok Dara, and K SankaranarayanaSamy. Challenges and opportunities in human robot collaboration context of industry 4.0-a state of the art review – Industrial Robot: the international journal of robotics research and application, 2021

[2] Bernd Dworschak and Helmut Zaiser – Competences for cyberphysical systems in manufacturing – first findings and scenarios. Procedia CIRP. 2014, 25 pp. 345–350

[3] Thomas B. Sheridan – Human–robot interaction: status and challenges. Hum. Factors. 2016, 58 (4) pp. 525–532

[4] Evangelou G., Dimitropoulos N., Michalos G., Makris S. – An approach for task and action planning in human–robot collaborative cells using ai –. Procedia CIRP. 2021, 97 pp. 476–481

[5] Fusaro F., Lamon E., De Momi E., Ajoudani A. An integrated dynamic method for allocating roles and planning tasks for mixed human-robot teams. In IEEE International Conference on Robot & Human Interactive Communication, pages 534–539, 2021

[6] Ali Ahmad Malik and Arne Bilberg. Complexity-based task allocation in human-robot collaborative assembly. Industrial Robot: the international journal of robotics research and application, 2019

[7] Faroni M., Beschi M., Ghidini S., Pedrocchi N., Umbrico A., Orlandini A. et al. A layered control approach to human-aware task and motion planning for human-robot collaboration – In IEEE International Conference on Robot and Human Interactive Communication, 2020

[8] Przemyslaw A Lasota and Julie A Shah. Analyzing the effects of human-aware motion planning on close-proximity human–robot collaboration. Hum. Factors. 2015, 57 (1) pp. 21–33

[9] Makris S. Cooperating robots for flexible manufacturing. Number 1. Springer International Publishing, 2021

[10] Umbrico A., Orlandini A., Cesta A., Koukas S., Zalonis A., Fourtakas N. et al. Towards user-awareness in human-robot collaboration for future cyber-physical systems – In IEEE International Conference on Emerging Technologies and Factory Automation, pages 1–8, 2021

[11] Umbrico A., Orlandini A., Cesta A. – An ontology for human-robot collaboration –. Procedia CIRP. 2020, 93 pp. 1097–1102

[12] Aurélie C., Pacherie E., Alami R., Chatila R. – Key elements for human-robot joint action, pages 159–177 – Springer International Publishing, Cham, 2017

[13] Cristiano Castelfranchi. Modelling social action for ai agents – Artificial Intelligence, 103(1):157-182, 1998 – Artificial Intelligence 40 years later

[14] Devin S., Alami R. An implemented theory of mind to improve human-robot shared plans execution – In ACM/IEEE International Conference on Human-Robot Interaction (HRI), pages 319– 326, 2016

[15] Auer S¨., Kovtun V., Prinz M., Kasprzik A., Stocker M., Vidal M.E. Towards a knowledge graph for science – In Proceedings of the International Conference on Web Intelligence, Mining and Semantics. Association for Computing Machinery, 2018

[16] Xiaojun Chen, Shengbin Jia, and Yang Xiang – A review: Knowledge reasoning over knowledge graph –. Expert Syst. Appl. 2020, 141 p. 112948

[17] Antoniou G., van Harmelen F. Web Ontology Language: OWL, pages 67–92 – Springer Berlin Heidelberg, Berlin, Heidelberg, 2004

[18] S. Borgo, M. Carrara, P. Garbacz, and P.E. Vermaas – A formal ontological perspective on the behaviors and functions of technical artifacts –. Artif. Intell. Eng. Des. Anal. Manuf. 2009, 23 (1) pp. 3–21

[19] Stefano Borgo, Amedeo Cesta, Andrea Orlandini, and Alessandro Umbrico – Knowledge-based adaptive agents for manufacturing domains –. Eng. Comput. 2019, 35 (3) pp. 755–779

[20] S. Borgo, A. Cesta, A. Orlandini, and A. Umbrico – A planningbased architecture for a reconfigurable manufacturing system – In ICAPS, the 26th International Conference on Automated Planning and Scheduling, 2016

[21] Richard E Fikes and Nils J Nilsson – Strips. A new approach to the application of theorem proving to problem solving –. Artif. Intell. 1971, 2 (3-4) pp. 189–208

[22] Drew Mcdermott, Malik Ghallab, Adele Howe, Craig Knoblock, Ashwin Ram, Manuela Veloso, Daniel Weld, and David Wilkins – PDDL – The Planning Domain Definition Language – Technical report, CVC TR-98-003/DCS TR-1165, Yale Center for Computational Vision and Control, 1998

[23] Fox M., Long D. – PDDL2.1: an extension to PDDL for expressing temporal planning domains –. J. Artif. Intell. Res. 2003, 20 pp. 61–124 [JAIR]

[24] Ghallab M., Nau D., Traverso P. – The actor's view of automated planning and acting: A position paper –. Artif. Intell. 2014, 208 pp. 1–17

[25] Félix Ingrand and Malik Ghallab – Deliberation for autonomous robots: A survey –. Artif. Intell. 2017, 247 pp. 10–44 [– Special Issue on AI and Robotics]

[26] Marta Cialdea Mayer, Andrea Orlandini, and Alessandro Umbrico – Planning and execution with flexible timelines: a formal account –. Acta Inform. 2016, 53 (6-8) pp. 649–680

[27] Alessandro Umbrico, Amedeo Cesta, Marta Cialdea Mayer, and Andrea Orlandini – PLATINUm: A New Framework for Planning and Acting – Lecture Notes in Computer Science, pages 498–512, 2017

[28] Amedeo Cesta, Andrea Orlandini, and Alessandro Umbrico – Fostering robust human-robot collaboration through ai task planning – Procedia CIRP, 72:1045–1050, 2018 – 51st CIRP Conference on Manufacturing Systems

[29] A. Umbrico, A. Cesta, M. Cialdea Mayer, and A. Orlandini – Integrating resource management and timeline-based planning – In The 28th International Conference on Automated Planning and Scheduling (ICAPS), 2018

[30] Johnson M., Bradshaw J.M., Feltovich P.J., Jonker C.M. M. Birna van Riemsdijk, and Maarten Sierhuis – Coactive design: Designing support for interdependence in joint activity –. J. Hum. Robot Interact. 2014, 3 (1) pp. 43–69

[31] Javier Barreiro, Matthew Boyce, Minh Do, Jeremy Frank, Michael Iatauro, Tatiana Kichkaylo, Paul Morris, James Ong, Emilio Remolina, Tristan Smith, and David Smith – EUROPA: A Platform for AI Planning, Scheduling, Constraint Programming, and Optimization – In ICKEPS 2012: the 4th Int. Competition on Knowledge Engineering for Planning and Scheduling, 2012

[32] Cesta A., Cortellessa G., Denis M., Donati A., Fratini S., Oddi A. et al. – MEXAR2: AI Solves Mission Planner Problems –. IEEE Intell. Syst. 2007, 22 (4) pp. 12–19

[33] Kanna Rajan and Alessandro Saffiotti – Towards a science of integrated AI and Robotics –. Artif. Intell. 2017, 247 pp. 1–9

[34] MVA Raju Bahubalendruni and Bibhuti Bhusan Biswal – A novel concatenation method for generating optimal robotic assembly sequences –. Proc. Inst. Mech. Eng., C J. Mech. Eng. Sci. 2017, 231 (10) pp. 1966–1977

[35] G Bala Murali, BBVL Deepak, MVA Raju, and BB Biswal – Optimal robotic assembly sequence planning using stability graph through stable assembly subset identification –. Proc. Inst. Mech. Eng., C J. Mech. Eng. Sci. 2019, 233 (15) pp. 5410–5430

[36] Alessandro Umbrico, Amedeo Cesta, Marta Cialdea Mayer, and Andrea Orlandini – Evaluating robustness of an acting framework over temporally uncertain domains – In Mario Alviano, Gianluigi Greco, and Francesco Scarcello, editors, AI*IA 2019 – Advances in Artificial Intelligence, pages 250–263, Cham, 2019 – Springer International Publishing

[37] Vidal T. A unified dynamic approach for dealing with temporal uncertainty and conditional planning – In AIPS-00 – Proc. of the Fifth Int. Conf. on Artificial Intelligence Planning and Scheduling, pages 395–402, 2000

[38] A. Cesta, A. Orlandini, G. Bernardi, and A. Umbrico – Towards a planning-based framework for symbiotic human-robot collaboration – In 21th IEEE International Conference on Emerging Technologies and Factory Automation (ETFA) – IEEE, 2016

[39] Stefania Pellegrinelli, Andrea Orlandini, Nicola Pedrocchi, Alessandro Umbrico, and Tullio Tolio – Motion planning and scheduling for human and industrial-robot collaboration – CIRP Annals –. Manufacturing Technology. 2017, 66 pp. 1–4

[40] Ren W., Xiaonan Yang Y., Hu Y. – The decision-making framework for assembly tasks planning in human– robot collaborated manufacturing system –. Int. J. Comput. Integrated Manuf. 2022, ••• pp. 1–19

[41] Hung Pham and Quang-Cuong Pham – A new approach to timeoptimal path parameterization based on reachability analysis –. IEEE Trans. Robot. 2018, 34 (3) pp. 645–659

[42] Mohamed Elbanhawi and Milan Simic – Sampling-based robot motion planning: A review –. IEEE Access. 2014, 2 pp. 56–77

[43] Tarbouriech S., Suleiman W. – Bi-objective motion planning approach for safe motions: Application to a collaborative robot –. J. Intell. Robot. Syst. 2020, 99 pp. 45–63

[44] Hayne R., Luo R., Berenson D. Considering avoidance and consistency in motion planning for human-robot manipulation in a shared workspace – In 2016 IEEE International Conference on Robotics and Automation (ICRA), pages 3948–3954, 2016

[45] E. A. Sisbot and R. Alami – A human-aware manipulation planner –. IEEE Trans. Robot. 2012, 28 (5) pp. 1045–1057

[46] Christoph Byner, Björn Matthias, and Hao Ding – Dynamic speed and separation monitoring for collaborative robot applications-concepts and performance –. Robot. Comput.-Integr. Manuf. 2019, 58 pp. 239–252

[47] Faroni M., Beschi M., Pedrocchi N. – An MPC framework for online motion planning in human-robot collaborative tasks – In Proceedings of the IEEE Int. Conf. on Emerging Tech. and Factory Automation, Zaragoza (Spain), 2019

[48] ISO/TS 15066:2016, *Robots and robotic devices — Collaborative robots — Technical report, International Organization for Standardization, Geneva, CH, 2016*

[49] Tsarouchi P., Makris S., Chryssolouris G. Human–robot interaction review and challenges on task planning and programming. Int. J. Comput. Integrated Manuf. 2016, 29 (8) pp. 916–931

[50] Dionisis Andronas, George Apostolopoulos, Nikos Fourtakas, and Sotiris Makris – Multi-modal interfaces for natural human-robot interaction –. Procedia Manuf. 2021, 54 pp. 197–202

[51] Hakan Gultekin, Ozden O. Dalgı¸c, and M. Selim Akturk – Pure cycles¨ in two-machine dual-gripper robotic cells –. Robot. Comput.-Integr. Manuf. 2017, 48 pp. 121–131

[52] Foumani M., Gunawan I., Smith-Miles K. – Resolution of deadlocks in a robotic cell scheduling problem with post-process inspection system: Avoidance and recovery scenarios – In 2015 IEEE International Conference on Industrial Engineering and Engineering Management (IEEM), pages 1107–1111, 2015

[53] A. Orlandini, M. Suriano, A. Cesta, and A. Finzi – Controller synthesis for safety critical planning – In IEEE International Conference on Tools with Artificial Intelligence, pages 306–313, 2013

[54] Villagrossi E., Pedrocchi N., Beschi M. Simplify the robot programming through an action-and-skill manipulation framework – In IEEE International Conference on Emerging Technologies and Factory Automation, pages 1-6, 2021

[55] Cesare Tonola, Marco Faroni, Nicola Pedrocchi, and Manuel Beschi – Anytime informed path re-planning and optimization for humanrobot collaboration – In IEEE International Conference on Robot Human Interactive Communication (RO-MAN), pages 997-1002, 2021

[56] Gianfranco E. Modoni, Enrico G. Caldarola, Marco Sacco, and Walter Terkaj – Synchronizing physical and digital factory: benefits and technical challenges – Procedia CIRP, 79:472-477, 2019 – CIRP Conference on Intelligent Computation in Manufacturing Engineering, 18-20 July 2018, Gulf of Naples, Italy

[57] Schroeder G.N., Steinmetz C., Pereira C.E., Danubia B. Espindola – Digital twin data modeling with automationml and a communication methodology for data exchange –. IFAC-PapersOnLine. 2016, 49 (30) pp. 12–17

[58] Michael Schluse and Juergen Rossmann – From simulation to experimentable digital twins: Simulation-based development and operation of complex technical systems – In 2016 IEEE International Symposium on Systems Engineering (ISSE), pages 1-6, 2016

[59] Zhihao Liu, Xinran Wang, Yijie Cai, Wenjun Xu, Quan Liu, Zude Zhou, and Duc Truong Pham – Dynamic risk assessment and active response strategy for industrial human-robot collaboration –. Comput. Ind. Eng. 2020, 141 p. 106302