

# CIRP CATS 2026 Paper Finder

Tuesday, 28 April 2026

13:30-15:00

Time	Venue	Manuscript	Paper Title	All Author	Session Topic
13:30-15:00	Z211	PROCIR-D-25-01299	Generative AI-Driven Pathways For Robot Skill Learning And Human-Guided Transfer For Smart Assembly	Duidi Wu, Pai Zheng, Qianyou Zhao, Jin Qi, Jie Hu	(Dis)Assembly Informatics, Modeling, and Analytics
13:30-15:00	Z211	PROCIR-D-25-01449	SamgPose: Self-Attention Map Guided 6D Pose Estimation Via Diffusion Model	Cong Ma, Wencan Pei, Yiping Gao, Liang Gao, Xinyu Li, Qihao Liu	(Dis)Assembly Informatics, Modeling, and Analytics
13:30-15:00	Z211	PROCIR-D-25-01679	Human-Centric LLM-Guided Redundancy Resolution Via Particle Swarm Optimization And Multi-Criteria Evaluation	Zekai Ai, Jianhua Liu, Zhuoheng Liu, Yifan Qie, Nabil Anwer	(Dis)Assembly Informatics, Modeling, and Analytics
13:30-15:00	Z211	PROCIR-D-25-01451	Automatic Assembly Instruction Generation From CAD Using Reverse Reinforcement Learning And Large Language Models	Niklas Widulle, Oliver Niggemann	(Dis)Assembly Informatics, Modeling, and Analytics
13:30-15:00	Z211	PROCIR-D-25-01431	Synchronizing Product And Assembly System Modularization Via The Elementary Technical Functions Matrix	Charbel Tauk, Paul Stief, Xavier Godot, Jean-Yves Dantan	(Dis)Assembly Informatics, Modeling, and Analytics
13:30-15:00	Z207	PROCIR-D-25-01065	Embodied Multi-Agent System Integrating VLA For AR-Assisted HRC Assembly Task Reasoning And Autonomous Execution	Changchun Liu, Dunbing Tang, Qingwei Nie	AI, Foundation Models, and Intelligent Automation
13:30-15:00	Z207	PROCIR-D-25-01185	Generative AI-Enabled Fast Restoration And Repair Of High Value Artifacts	Yuan Liu, Yun Zhao, Jiao Jiao, Yang Yang, Xingzhi Wang	AI, Foundation Models, and Intelligent Automation
13:30-15:00	Z207	PROCIR-D-25-01265	A Vision-Language Model Based Intelligent Part Matching Method For Assembly Decision Support	Wei Wei, Zhuoshi Li, Guangqing Xu, Chenliang Hao, Chuan Jiang, Long Zeng	AI, Foundation Models, and Intelligent Automation
13:30-15:00	Z207	PROCIR-D-25-01275	Towards Autonomous Machine Learning Deployment In Assembly Manufacturing Using Large Language Models	Yongrui Yu, Chao Zhang, Dongxu Ma, Qingfeng Xu, Guanghui Zhou	AI, Foundation Models, and Intelligent Automation
13:30-15:00	Z207	PROCIR-D-25-01276	Guiding Vision-Language Models With Structured Scene Representations For Zero-Shot Assembly Action Recognition	Ruirui Zhong, Bingtao Hu, Yixiong Feng, Qiang Qin, Gengfeng Zheng, Xi Vincent Wang, Lihui Wang, Jianrong Tan	AI, Foundation Models, and Intelligent Automation

Time	Venue	Manuscript	Paper Title	All Author	Session Topic
13:30-15:00	Z207	PROCIR-D-25-01339	A Human-in-the-Loop Point-and-Click AR System for Pose Estimation: A Proof-of-Concept for Intuitive Robot Programming	Sebastian Blankemeyer, David Wendorff, Annika Raatz	AI, Foundation Models, and Intelligent Automation
13:30-15:00	Z209	PROCIR-D-25-01188	Assembly Systems Engineering For Large Scale Electrolyzer Production	Minglong Li, Peter Chemweno, Sebastian Thiede	Process Planning, Scheduling, and Control
13:30-15:00	Z209	PROCIR-D-25-01423	A Physical Feasibility-Aware Sequence Planner For Robotic Assembly-Picking Systems	Xiaomei Xu, Jaykumar Bhagigya, Marco Schneider, Rainer Müller	Process Planning, Scheduling, and Control
13:30-15:00	Z209	PROCIR-D-25-01427	Data-Driven Process Optimization Framework For Aero-Engine Rotor Precise Assembly	Hui Wang, Zesheng Wang, Dongyang Xu, Gang Zhao, Hongqiang Bao, Lifeng Du	Process Planning, Scheduling, and Control
13:30-15:00	Z209	PROCIR-D-25-01428	Considering Assembly Relationship Complexity In U-Shaped Assembly Line Balancing	Jiahua Zhang	Process Planning, Scheduling, and Control
13:30-15:00	Z209	PROCIR-D-25-01344	AI-Enabled Scheduling Framework For Remanufacturing	Angelos Christos Bavelos, Papoutsi Dimitra, Dionisis Valianatos, Dimosthenis Dimosthenopoulos, Christos Gkournelos, Sotiris Makris	Process Planning, Scheduling, and Control
13:30-15:00	Z209	PROCIR-D-25-01471	Research on Model Slicing and Path Planning for Robot - Assisted Multi - Axis DIW Conformal Additive Manufacturing	Peng Chen, Peng Zeng, Yanqiu Chen, Jun Ren, Yang Zhang, Yu Liu	Process Planning, Scheduling, and Control
13:30-15:00	Z412	PROCIR-D-25-01201	A Human-Friendly Framework And Methodology For Proactive Human-Robot Collaborative Disassembly	Shanghai Mi, Yang Cao, Chen Xu, Yicong Gao, Siyuan Zeng, Hao Zheng	Human-Robot Collaboration
13:30-15:00	Z412	PROCIR-D-25-01273	A Multi-Agent Enabled Task Planning And Execution Framework For Human-Robot Collaborative Assembly In Industry 5.0	Dongxu Ma, Guanghui Zhou, Yongrui Yu, Yujia Wang, Chao Zhang	Human-Robot Collaboration
13:30-15:00	Z412	PROCIR-D-25-01340	Towards Empathic And Resilient Production Systems: Comparing Simulation-Based And Empirical Assessments Of Human-Robot Task Allocation In Maintenance Tasks	Noël Scheder, Lorenz Gudat, Maximilian Haug, Georgia Sideri, Matthias Hayek, Sebastian Schlund	Human-Robot Collaboration
13:30-15:00	Z412	PROCIR-D-25-01464	Towards Human-Robot Symbiotic Disassembly: A Physiological Information-Fused Human-Robot Mutual Cognition Workcell Architecture	Ducai Wang, Peiji Liu, Huajun Cao, Liqiao Xia, Pai Zheng	Human-Robot Collaboration
13:30-15:00	Z412	PROCIR-D-25-01662	Interaction Learning Enhanced Cognition-Centric AI Agent For Proactive Human-Robot Collaboration	Jie Zhang, Pengfei Ding, Peng Zhang	Human-Robot Collaboration

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13:30-15:00	Z413	PROCIR-D-25-01199	Research On Green Assembly Technology For Airframe Structure And Its Key Implementation Solutions	Feiyan Guo, Xiliang Sha, Qiangwei Bao	Design for Assembly/Disassembly and Joining Technologies
13:30-15:00	Z413	PROCIR-D-25-01326	A Framework Of Assembly-Informed Cable-Pipeline Joint Layout Design Optimization In Aircraft Wheel Well	Wenzheng Lin, Ranran Wang, Tao Peng, Renzhong Tang, Hao Wang	Design for Assembly/Disassembly and Joining Technologies
13:30-15:00	Z413	PROCIR-D-25-01432	Influence Of Workpiece Temperature On Gripper Heat Distribution In Tailored Forming	Caner-Veli Ince, Marieke Weber, Sebastian Blankemeyer, Annika Raatz	Design for Assembly/Disassembly and Joining Technologies
13:30-15:00	Z413	PROCIR-D-25-01425	Autonomous Disassembly-Assembly Framework For Robotic Remanufacturing Based On Reversible Skill Learning	Yue Zang, Xiazhen Xu, Ze Zhang, Yongjing Wang, Ashutosh Tiwari	Design for Assembly/Disassembly and Joining Technologies
13:30-15:00	Z413	PROCIR-D-25-01447	Design For Assembly Of Complex Microwave Waveguides As LEGO Bricks Using Graph Rewriting Method	Changkun Sun, Nanya Li, Qiang Cheng, Lihui Wang, S.K. Ong	Design for Assembly/Disassembly and Joining Technologies
13:30-15:00	Z413	PROCIR-D-25-01248	Tolerance allocation for multiphysical system – Application to an electrical vehicle battery module	Chloé Nerestan, Denis Teissandier, Yann Ledoux, Ferdinand Graeff	Design for Assembly/Disassembly and Joining Technologies
13:30-15:00	Z414	PROCIR-D-25-01286	MatePre: A Graph Attention Network For Part Mating Surface Prediction	Weibo Li, Jiazhen Pang, Jie Zhang	Computer Vision, Perception, and Sensing
13:30-15:00	Z414	PROCIR-D-25-01287	A Keypoint Evolution Algorithm For Object 6D Pose Estimation In Assembly Scenarios Based On Imitation Reinforcement Learning	Guang Li, Junfeng Wang, Zhaoli Cao, Yang Mao, Ning Liu, Zhengping Che	Computer Vision, Perception, and Sensing
13:30-15:00	Z414	PROCIR-D-25-01293	Parallelism Prediction For Flange Precision Assembly Based On Virtual Assembly Model And Point Cloud Deep Learning	Yihao Shen, Qifu Meng, Yi Guo, Dechang Zhang, Zhiwei Sun, Qiushuang Zhang, Hualin Yang, Xin Jin	Computer Vision, Perception, and Sensing
13:30-15:00	Z414	PROCIR-D-25-01420	A High-Fidelity Virtual Point Cloud Dataset Construction Method For Semantic Recognition In Complex Assembly Scenarios By Rendering Measurement Behaviors	Maocheng Xu, Pengfei Zhang, Changri Xiong, Gang Zhao	Computer Vision, Perception, and Sensing
13:30-15:00	Z414	PROCIR-D-25-01494	A Two-Stage Algorithm For Smoking Detection In Industrial Work Environments	Shenyuan Gao, Guozhong Huang, Mingxin Liu, Xuehong Gao	Computer Vision, Perception, and Sensing

Time	Venue	Manuscript	Paper Title	All Author	Session Topic
13:30-15:00	Z414	PROCIR-D-25-01385	Robust Multi-Sensor 6D Pose Estimation with Uncertainty Quantification for Industrial Automation	David Wendorff, Sebastian Blankemeyer, Annika Raatz	Computer Vision, Perception, and Sensing

**15:30-17:00**

Time	Venue	Manuscript	Paper Title	All Author	Session Topic
15:30-17:00	Z211	PROCIR-D-25-01308	Contact Deformation Prediction Of Assembly Surface Based On Physics-Informed Neural Network	Feng Lv, Xiaojun Liu, Xiwang Ma, Dazhou Chai, Yang Yi, Haoyu Yu, Zuguang Huang	(Dis)Assembly Informatics, Modeling, and Analytics
15:30-17:00	Z211	PROCIR-D-25-01595	State-Augmented Graphs For Circular Economy Triage	Richard Fox, Rui Li, Gustav Jonsson, Farzaneh Goli, Miying Yang, Emel Aktas, Yongjing Wang	(Dis)Assembly Informatics, Modeling, and Analytics
15:30-17:00	Z211	PROCIR-D-26-00005	Explainable Knowledge Recommendation For Human-Centric Assembly Based On Context-Aware Knowledge Graphs	Yifan Pang, Yuanhao Li, Yingfeng Zhang	(Dis)Assembly Informatics, Modeling, and Analytics
15:30-17:00	Z211	PROCIR-D-25-01680	A Novel Framework For Quantitative Robotic Grasp Quality Evaluation	Mohammad Mahin Shoaib, Karel Kellens, Jef Peeters	(Dis)Assembly Informatics, Modeling, and Analytics
15:30-17:00	Z211	PROCIR-D-25-01341	Data-Driven Statistical Tolerance Analysis For Production Machines Demonstrated On Battery Cell Stacking	Franz Dietrich, Joost Ohrenberg, Christoph Rosenberg, Wei Lin, Stephan Tschechne	(Dis)Assembly Informatics, Modeling, and Analytics
15:30-17:00	Z207	PROCIR-D-25-01289	Chat-To-CAD: Sequential B-Rep Construction With Constraints Management	Tianxin Yan, Qiang Cui, Chunyang Yu	AI, Foundation Models, and Intelligent Automation
15:30-17:00	Z207	PROCIR-D-25-01443	A Vision-Language Based Framework For Context-Aware Task Planning In Human-Robot Collaborative Assembly	Zian Li, Wenjun Xu, Ziheng Liu, Mengyuan Ba, Xiao Qiu, Bang You	AI, Foundation Models, and Intelligent Automation
15:30-17:00	Z207	PROCIR-D-25-01444	Leveraging GraphRAG For Human-Robot Collaborative Disassembly Sequence Planning In Remanufacturing	Lve Sun, Youxi Hu, Yongjing Wang, Xixing Li, Ming Zhang, Chao Liu, Yuchun Xu	AI, Foundation Models, and Intelligent Automation
15:30-17:00	Z207	PROCIR-D-25-01448	CogAssem: A VLM-Driven Architecture Bridging Cognition And Execution For Intelligent Robotic Assembly In Flexible Manufacturing	Wencan Pei, Cong Ma, Xinyu Li, Liang Gao, Yiping Gao, Chunjiang Zhang	AI, Foundation Models, and Intelligent Automation
15:30-17:00	Z207	PROCIR-D-25-01489	Beyond The "Third Hand": Can Agentic LLMs Promote Cognitive Partnerships In Robotic Assembly?	Benedikt Frey, David Kostolani, Warren Purcell, Andreas Dorer, Santiago Calvo Salazar, Daniel Schall, Sebastian Schlund	AI, Foundation Models, and Intelligent Automation

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15:30-17:00	Z207	PROCIR-D-25-01472	From Designer Insight to AI Collaboration: Reconstructing Pathways to Identify Latent Needs of the Elderly	Ruo Yu Gu, Lu Lin, Yu Wang	AI, Foundation Models, and Intelligent Automation
15:30-17:00	Z209	PROCIR-D-25-01458	Intelligent Assembly Sequence Planning System Framework Based On Autonomous Interaction of 3D Models	Zipeng Su, Bairen Chen, Zhijia Xu, Qi Jiang, Shancong Mo	Process Planning, Scheduling, and Control
15:30-17:00	Z209	PROCIR-D-25-01470	Empowering Assembly Systems Through LLM-Integrated Multi-Agent Scheduling For Ship Sub-Assembly Welding	Shengchuan Wu, Mingzhi Chen, Yahui Zhang, Xiaofeng Hu	Process Planning, Scheduling, and Control
15:30-17:00	Z209	PROCIR-D-25-01587	Hierarchical Collaborative Optimization Method Of Component Selection And Reassembly Scheduling For Retired Electric Vehicle Batteries	Meihua Zeng, Kai Zhang, Ting Qu, Yongheng Zhang, Pai Zheng, Yang Liu, George Q. Huang	Process Planning, Scheduling, and Control
15:30-17:00	Z209	PROCIR-D-25-01606	A Flow Matching-Based Generative Optimization Framework For Assembly Line Balancing Problem In Flexible Manufacturing Systems	Chengyu Lu, Zhaoxi Hong, Zhixin Liu, Dinglong Yang, Yixiong Feng, Jianrong Tan	Process Planning, Scheduling, and Control
15:30-17:00	Z209	PROCIR-D-25-01611	An Improved Whale Algorithm Based Multi-Objective Optimal Scheduling Of Mixed-Flow Production Lines With Multi-AGVs	Xiaobin Li, Kaikai Zhu, Yuhang Chen, Rui Hu	Process Planning, Scheduling, and Control
15:30-17:00	Z209	PROCIR-D-25-01277	Route Optimization for a Multi-Truck and Drone Delivery Model Based on a Two-Stage Method	Jianan Chen, Yong Wang	Process Planning, Scheduling, and Control
15:30-17:00	Z412	PROCIR-D-25-01440	Human-Robot Cooperation Suitability Assessment For Disassembly Systems	Bugra Alkan, Natalia Hartono, Louie Webb, Myo Nyi Nyi Min, Malarvizhi Kaniappan Chinnathai	Human-Robot Collaboration
15:30-17:00	Z412	PROCIR-D-25-01454	Adaptive Task-Sequence Planning For Human-Robot Collaborative Assembly Using Dynamic Knowledge Graphs And Multi-Agent Reinforcement Learning	Jiaxu Gao, Bernd Kuhlenkötter, Weihua Li, Kai Wu	Human-Robot Collaboration
15:30-17:00	Z412	PROCIR-D-25-01460	Enhancing Human-Robot Collaborative Assembly: A Structured Hierarchical Modeling Approach	Guoyi Xia, Zied Ghrairi, Wang Lei, Mengmeng Qiao, Klaus-Dieter Thoben	Human-Robot Collaboration
15:30-17:00	Z412	PROCIR-D-25-01478	Tool To Bridge: Research On Human-Machine Collaborative Systems For Upper Limb Rehabilitation In Home-Based Elderly Care	Yiqi Qian, Ruyao Xia, Yingzhen Jing, Lu Lin	Human-Robot Collaboration

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15:30-17:00	Z412	PROCIR-D-25-01599	Conflict Prevention In Industrial Human–Robot Tool Sharing: A Comparative Study	Matteo Manzardo, Davide Ciaghi, Alena Mezentseva, Federico Fraboni, Rabert Rajesh Mallavarapu, Marco De Angelis, Renato Vidoni, Luca Gualtieri	Human-Robot Collaboration
15:30-17:00	Z412	PROCIR-D-25-01437	Integrating Life Cycle Assessment into Human-Robot Collaborative Assembly for Sustainable Manufacturing	Muhammad Umar, Aqib Mashood Khan, Xiuqing Hao, Adnan Javed, Muhammad Jamil	Human-Robot Collaboration
15:30-17:00	Z413	PROCIR-D-25-01601	Model And Calibration For Galvanometric Laser Scanning Systems	Shifeng Shi, Liyan Zhang	Design for Assembly/Disassembly and Joining Technologies
15:30-17:00	Z413	PROCIR-D-25-01612	Screw Layout Optimization Based On The Optimal Eye Movement Search Strategies: Improving Disassemblability Of Smartphones	Chuangchuang Cui, Libin Zhu, Yuhao Xue, Haihong Huang	Design for Assembly/Disassembly and Joining Technologies
15:30-17:00	Z413	PROCIR-D-25-01669	Prediction Of Surface Figure Error In Dual-Reflector Optical Systems Using Fractal Contact And Virtual Material Layer Modeling	Baihui Gao, Jiazhen Pang, Yan Ke, Jiajun He, Jianfeng Yu	Design for Assembly/Disassembly and Joining Technologies
15:30-17:00	Z413	PROCIR-D-25-01688	Mechanistic Study Of Chip-Induced Secondary Machining On Hole-Wall Morphology In CFRP/Ti Stack Drilling	Kuangqing Hu, Shunuan Liu	Design for Assembly/Disassembly and Joining Technologies
15:30-17:00	Z413	PROCIR-D-25-01603	Sparse Reconstruction Method For Riveting Deformation Fields Based On Neural Operators	Wencai Yu, Yong Zhao, Qingyuan Lin, Yuming Liu, Wei Wang	Design for Assembly/Disassembly and Joining Technologies
15:30-17:00	Z413	PROCIR-D-25-01182	Multi-modal DL model-driven surface morphology prediction of ultra-precision machining	Zhicheng Xu, Wai Sze Yip, Suet To	Design for Assembly/Disassembly and Joining Technologies
15:30-17:00	Z414	PROCIR-D-25-01455	Research On Multimodal Information Recognition Based Intelligent Assembly Operation Detection Method	Chao Chen, Zhicheng Huang, Qile Su, Yongqiang Wan, Xinzheng Xu, Zhuja Li	Computer Vision, Perception, and Sensing
15:30-17:00	Z414	PROCIR-D-25-01655	A Novel Point Cloud And Attribute Adjacency Graph Integrated Machining Feature Recognition Approach	Junkai Yao, Xinxin Liang, Jihong Liu, Zuoxu Wang	Computer Vision, Perception, and Sensing
15:30-17:00	Z414	PROCIR-D-25-01664	Lightweight Drift-Resistant Indoor Localization With Short-Term LIO Odometry And Long-Term RGB-D Factor-Graph Consistency	Ze Zhang, Zhijie Yan, Shufei Li, Zuoxu Wang	Computer Vision, Perception, and Sensing

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15:30-17:00	Z414	PROCIR-D-25-01492	A High-Precision Multi-Sensor Cooperative Online Perception Method For Force-Position Parameters In The Assembly Of Large Composite Aircraft Components	Qihang Chen, Yang Zhang, Chenfeng Hou, Yongkang Lu, Yanjun Shi, Pai Zheng, Wei Liu	Computer Vision, Perception, and Sensing
15:30-17:00	Z414	PROCIR-D-25-01600	Nanoscale Positioning Measurements Based On The Interpolation And Registration Of Microscopic Images Of Ultra-Precision Diamond Turned Surface Topography	Zijian Zhu, Chi Fai Cheung, Chenyang Zhao	Computer Vision, Perception, and Sensing
15:30-17:00	Z414	PROCIR-D-25-01314	Efficient Continual Learning for Visual Quality Inspection in Remanufacturing	Johannes Bauer, Paul Geng, Stephan Trattnig, Petr Dokládál, Rüdiger Daub	Computer Vision, Perception, and Sensing

## Wednesday, 29 April 2026

### 10:30-12:00

Time	Venue	Manuscript	Paper Title	All Author	Session Topic
10:30-12:00	TU103	PROCIR-D-25-01469	A Knowledge-Driven Agentic Framework For Multi-Variant Product Disassembly	Lam Kai Yi, Koo Chee Hung, Ong Kevin, Jeon Jinhan, Ong Soh Khim	AI, Foundation Models, and Intelligent Automation
10:30-12:00	TU103	PROCIR-D-25-01605	Research On A Large Language Model-Driven Method For Mining Manufacturing Knowledge Rules	Zhixin Liu, Bingtao Hu, Yixiong Feng, Zhifeng Zhang, Zhaoxi Hong, Chengyu Lu, Jianrong Tan	AI, Foundation Models, and Intelligent Automation
10:30-12:00	TU103	PROCIR-D-25-01442	Agent4Assembly: An Industrial Agent For Autonomous Assembly Fault Diagnosis And Troubleshooting	Jiehan Zhou, Jinling Yu, Jie Kong, Tianze Shi, Peifeng Liu, Xun Xu	AI, Foundation Models, and Intelligent Automation
10:30-12:00	TU103	PROCIR-D-25-01466	An Intelligent Assembly Process Planning Framework Integrating Process Knowledge Graph And Large Language Model	Yongqiang Wan, Zhicheng Huang, Chao Chen, Xinzheng Xu, Zhujia Li	AI, Foundation Models, and Intelligent Automation
10:30-12:00	TU103	PROCIR-D-25-01660	Automated Construction Method Of Process Knowledge Graph For Aerospace Structural Parts Based On Fine-Tuned LLM	Jiangkun Hu, Jie Zhang, Youlong Lv, Jutao Guo, Bo Zhao	AI, Foundation Models, and Intelligent Automation
10:30-12:00	TU103	PROCIR-D-25-01438	Cross-modal state graph fusion for anomaly detection in digital twin-driven robotic assembly lines	Xin Zhang, Yanglong Lu	AI, Foundation Models, and Intelligent Automation
10:30-12:00	TU107	PROCIR-D-25-01658	An Ontology Rule-Based Reasoning For Tool-Constrained Disassembly Line Balancing	Yilin Fang, Xiandong Luo, Muyao Tan, Junyufeng Chen, Ling Gui, Kai Huang, Quan Liu, Zude Zhou	Process Planning, Scheduling, and Control

Time	Venue	Manuscript	Paper Title	All Author	Session Topic
10:30-12:00	TU107	PROCIR-D-25-01668	Decision Optimization Method For Aircraft Final Assembly Line Simulation	Guanhua Gao, Jie Zhang, Jiazhen Pang, Bolin Chen	Process Planning, Scheduling, and Control
10:30-12:00	TU107	PROCIR-D-25-01678	Parametric Automatic Path Planning Method For Coordinate Measuring Machines With Turntable For Revolving Bodies	Xin Jin, Xiaole Guan, Shuangying Yan	Process Planning, Scheduling, and Control
10:30-12:00	TU107	PROCIR-D-25-01684	Adaptive Multi-Objective Assembly Scheduling: A Deep Reinforcement Learning Framework	Yuheng Cao, Zhifeng Zhang, Junjie Song, Yixiong Feng, Jianrong Tan	Process Planning, Scheduling, and Control
10:30-12:00	TU107	PROCIR-D-25-01324	Phase-Based Feature Extraction For Error Classification Of Thread-Forming Screw Assembly Using Machine Learning	Michelle Henkies, Nikolai West, Jochen Deuse	Process Planning, Scheduling, and Control
10:30-12:00	TU107	PROCIR-D-25-01343	Integration of machine learning and VDI/VDE standards for holistic monitoring of torque-angle curves	Matthias Lück, Oliver Riedel	Process Planning, Scheduling, and Control
10:30-12:00	TU201	PROCIR-D-25-01482	Agentic Memory: Enabling Situational Resonance In Human-Robot Collaboration	Jiahui Si, Wenchao Li, Jie Li, Jianhao Lv, Tao Peng, Jinsong Bao	Human-Robot Collaboration
10:30-12:00	TU201	PROCIR-D-25-01484	Tacit Knowledge Elicitation: A "Disassembly-Integration" Human-AI Framework For Design Cognitive Construction	Yu Wang, Jiayi Qiu, Lu Lin	Human-Robot Collaboration
10:30-12:00	TU201	PROCIR-D-25-01488	Confidence-Aware Temporal Segment Networks For Real-Time Human Action Recognition And Speed Adaptation In Human-Robot Collaboration	Bsher Karbouj, Haokun Pan, Jörg Krüger	Human-Robot Collaboration
10:30-12:00	TU201	PROCIR-D-25-01491	Design Of An Intelligent Posture Adjustment Platform And Human-Machine Collaborative Control Strategy For Heavy-Duty Gas Turbine Assembly	Qian Zhao, Xin Guo, Wu Zhao, Xianglong Li, Xurui Li	Human-Robot Collaboration
10:30-12:00	TU201	PROCIR-D-25-01616	Fatigue-Aware Motion Prediction In Collaborative Assembly	Yonga Chuengwa T., Swanepoel J.A., Kurien A.M., Kanakana-Katumba M.G.	Human-Robot Collaboration
10:30-12:00	Z211	PROCIR-D-25-01267	High Accuracy Unscrewing For Robotic Disassembly	Pietro Sandrini, Adel Olabi, Quentin Consigny, Richard Bearee	Robotic Disassembly and Remanufacturing System
10:30-12:00	Z211	PROCIR-D-25-01323	Mitigating Tool Tip Uncertainty In Robotic Screw Unfastening: A Visual-Servoing Method	Bence Tipary, Gábor Ferenc Erdős, Ádám Fischer, Máté Gábor Seidl, Dániel Zsigri-Zágori, Ádám Juniki	Robotic Disassembly and Remanufacturing System

Time	Venue	Manuscript	Paper Title	All Author	Session Topic
10:30-12:00	Z211	PROCIR-D-25-01355	Demonstration Of A Flexible Automated Disassembly Process For Connectors In Battery Systems For Electric Vehicles	Sven Oldewurtel, Tom Henry Heise, Christoph Imdahl Habel, Christian Wacker, Sabrina Zellmer, Klaus Dröder	Robotic Disassembly and Remanufacturing System
10:30-12:00	Z211	PROCIR-D-25-01417	Development Of Tooling For Robotic Disassembly Of Electrical Connectors	Tom Machiels, Louise Brankart, Lander Ketelbuters, Karel Kellens	Robotic Disassembly and Remanufacturing System
10:30-12:00	Z211	PROCIR-D-25-01303	Towards Reconfigurable Robotic Skills: Open-World Reasoning For Collaborative Product Disassembly	Christos Gkournelos, Antonis Daskalakis, Nikolas Louka, Dimosthenis Dimosthenopoulos, George Michalos, Sotiris Makris	Robotic Disassembly and Remanufacturing System
10:30-12:00	Z412	PROCIR-D-25-01337	A LLM-Driven Multi-Agent Framework For Dynamic Shop Floor Scheduling: Formal Modeling And Testing For AGV Coordination	Pengfei Gao, Xiaofu Zou, Lishuang Liu, Xiaohua Wei	Process Planning, Scheduling, and Control
10:30-12:00	Z412	PROCIR-D-25-01651	Scheduling Optimization For Robotic Smart Reconfigurable Manufacturing Systems Based On Coalition Formation Game And Particle Swarm Optimization	Sihan Huang, Xue Wang, Ming Huang, Wei Dong, Yanchao Yin, Zujie Zheng, Liyang Dong, Guoxin Wang, Yan Yan, Guoqing Wang	Process Planning, Scheduling, and Control
10:30-12:00	Z412	PROCIR-D-25-01604	A Negotiation Algorithm For Multi-Agent Job Shop Scheduling Based On Evolutionary Game	Liyun Yan, Shudong Sun	Process Planning, Scheduling, and Control
10:30-12:00	Z412	PROCIR-D-25-01607	An Inverse Optimization Approach For An Aircraft Final Assembly Scheduling Problem	Kejun Qiu, Lu Chen	Process Planning, Scheduling, and Control
10:30-12:00	Z412	PROCIR-D-25-01290	A Digital Twin-Oriented Evaluating Method For Aircraft Wing Box Assembly Process Parameters Based On Uncertainty Quantification	Jinyue Li, Feiyan Guo, Wensheng Peng, Li Haoyu, Xiangchun Zhang, Yan Zewen, Zhou Yuqing	Process Planning, Scheduling, and Control
10:30-12:00	Z412	PROCIR-D-25-01436	A CGP-Based Scheduling Optimization Approach for Dynamic Flexible Job Shop Scheduling Problem considering Multi-level Assembly Operations	Yuxiang Ma, Junhao Wang, Shiduo Ning, Yanjun Shi	Process Planning, Scheduling, and Control
10:30-12:00	Z413	PROCIR-D-25-01295	Catch Me If You Can: Grasping Workpieces In Free Fall – A Novel Concept For Flexible Part Feeding	Torge Kolditz, Sascha Pascal Grindel, Annika Raatz	Reconfigurable Automation and Robot Skills
10:30-12:00	Z413	PROCIR-D-25-01298	HITL-DP3: Human-In-The-Loop Imitation Learning With 3D Diffusion Policy And Bilateral Teleoperation For Dexterous Tool Manipulation	Benhua Gao, Zeyuan Ren, Haofei Ma, Wei Wang, Pai Zheng	Reconfigurable Automation and Robot Skills
10:30-12:00	Z413	PROCIR-D-25-01397	When Does It Pay Off? Evaluating Automation Potential In Industrial Picking And Placing	Arvid Lang, Antonio Maffei, Fabio Marco Monetti, Edgar Patzel	Reconfigurable Automation and Robot Skills

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10:30-12:00	Z413	PROCIR-D-25-01666	Visual Teaching: A Concept For Flexible Robot Programming	Lukas Tanz, Joel Sánchez Hoffmann, Paul Geng, Rüdiger Daub	Reconfigurable Automation and Robot Skills
10:30-12:00	Z413	PROCIR-D-26-00018	An Augmented Reality-Based Human-Machine Collaboration Framework For Handling Industrial Robot	Jihong Yan, Ye Sun, Siyang Ji	Reconfigurable Automation and Robot Skills
10:30-12:00	Z413	PROCIR-D-25-01485	Multimodal Tactile Sensing-Enabled Dexterous Hand for Precision Grasping	Geming Chen, Yang Zhang, Yu Liu	Reconfigurable Automation and Robot Skills
10:30-12:00	Z414	PROCIR-D-25-01064	Probing A Multi-Agent And Industrial Language Model Framework Of Digital Twin For Human-Robot Collaborative Assembly	Qingwei Nie, Changchun Liu, Chao Zhang, Jianning Ding	Digital Twins and Process Monitoring
10:30-12:00	Z414	PROCIR-D-25-01195	Intelligent Autonomous Adaptation Of (Dis)Assembly Processes Via AI-Agents And In-Process Sensor Feedback	Matthias Scholer	Digital Twins and Process Monitoring
10:30-12:00	Z414	PROCIR-D-25-01230	Reinforcement Learning-Based Cascading Failure Analysis For Smart Assembly And Disassembly Networks	Lanchun Yang, Zhengang Guo, Zhida Kou	Digital Twins and Process Monitoring
10:30-12:00	Z414	PROCIR-D-25-01667	Digital Twin-Driven Risk Assessment System For Human-Machine Collaboration Production Workshop Toward Industry 5.0	Jinhua Xiao, Kaile Huang, Sergio Terzi, Marco Macchi, Marco Taisch	Digital Twins and Process Monitoring
10:30-12:00	Z414	PROCIR-D-25-01288	Assembly-Oriented Adaptive Machining Engaging Digital Twin - A Case Study Of Turbine Blade Root Grinding	Tianren Zhang, Yupeng Bai, Jie Jiang, Tao Peng, Yuanbin Wang	Digital Twins and Process Monitoring
10:30-12:00	Z414	PROCIR-D-25-01218	Digital Thread-Based Industrial Dataspace Modeling for Smart Assembly and Disassembly Networks	Zhengang Guo, Weicong Liang, Xiaohua Li, Yingfeng Zhang	Digital Twins and Process Monitoring

**13:30-15:00**

Time	Venue	Manuscript	Paper Title	All Author	Session Topic
13:30-15:00	TU103	PROCIR-D-25-01654	A LLM-Driven Intelligent Model Reconfiguration Framework In Model-Based Systems Engineering For Assembly Systems	Qiu hao Xu, Shizhen Huang, Jin Chen, Yifan Tan, Zelong Song, Xiaochen Zheng	AI, Foundation Models, and Intelligent Automation
13:30-15:00	TU103	PROCIR-D-25-01659	Multiple External Representations (MER)Based Multi-Agent G-Code Generation For Part Manufacturing	Yanjie Zhang, Tiance Yang, Fan li, ChingHung Lee	AI, Foundation Models, and Intelligent Automation

Time	Venue	Manuscript	Paper Title	All Author	Session Topic
13:30-15:00	TU103	PROCIR-D-25-01671	A VLM-Based Agentic System For Autonomous Assembly In Rebar-Reinforced 3D Concrete Printing	Fuji Hu, Yan Gao, Song Du, Qian Li, Yiwei Weng	AI, Foundation Models, and Intelligent Automation
13:30-15:00	TU103	PROCIR-D-26-00011	An Intelligent Reasoning Framework Based On Multimodal Knowledge Graph For Assembly Planning Of Complex Aeronautical Structures	Bowen Xu, Xin Guo, Wu Zhao, Jun Li	AI, Foundation Models, and Intelligent Automation
13:30-15:00	TU103	PROCIR-D-25-01304	Implementing Vision-Language-Action Models For Adaptive Robotic Assembly In Agile Manufacturing	Stylianios Nikoladakis, Loukas Prezas, Zoi Arkouli, Polykarpos Zarmakoupis, Nikos Dimitropoulos, Sotiris Makris	AI, Foundation Models, and Intelligent Automation
13:30-15:00	TU103	PROCIR-D-25-01468	A Digital Twin-enabled and LLM-assisted intelligent assembly method for robotic construction tasks	Qiang Qin, Victor Nan Fernandez-Ayala, Zhihao Liu, Ruirui Zhong, Xi Vincent Wang, Dimos V. Dimarogonas, Lihui Wang	AI, Foundation Models, and Intelligent Automation
13:30-15:00	Z211	PROCIR-D-25-01446	Robotic Disassembly Of Bonded Components In End-Of-Life Cell-To-Pack Electric Vehicle Batteries	Jun Huang, Xingqiang Jiang, Yuqin Zeng, Yilin Fang, Zude Zhou, Quan Liu, Yuping Zhang, Huawei Song, Xiuyi Ao, Duc Pham	Robotic Disassembly and Remanufacturing System
13:30-15:00	Z211	PROCIR-D-25-01673	Automatic Bolt Removal And Recovery With Adaptive Magnetic Control For Robotic Disassembly Of Retired Power Battery Packs	Haoyang Zhang, Rucheng Xiang, Junyang Wang, Jiangming Zhang, Wu Yan, Shaohua Kong, Zhaoyang Liao, Hailong Xie, Hongmin Wu	Robotic Disassembly and Remanufacturing System
13:30-15:00	Z211	PROCIR-D-25-01675	Design Of An Autonomous Disassembly System For End-Of-Life Products In Open World	Muyao Tan, Junyufeng Chen, Yilin Fang, Jun Huang, Quan Liu, Zude Zhou	Robotic Disassembly and Remanufacturing System
13:30-15:00	Z211	PROCIR-D-25-01676	Parameter Optimisation For Robotic Disassembly Of Snap-Fit Plug Connectors In End-Of-Life Electric Vehicle Batteries	Jun Huang, Mengying He, Quanyong Huang, Yilin Fang, Quan Liu, Zude Zhou, Huawei Song, Xiuyi Ao	Robotic Disassembly and Remanufacturing System
13:30-15:00	Z211	PROCIR-D-25-01473	Experimental Study On Cleaning Methods For Adhesive Microstructures	Thore Bochert, Jonas Michael, Kirsten Tracht	Robotic Disassembly and Remanufacturing System
13:30-15:00	TU201	PROCIR-D-25-01652	Adaptive Leakage-Aware Grasp Optimization For Flexible Granular Vacuum Grippers	Georg Siegemund, Frederik Hoefft, Arne Glodde, Franz Dietrich	Reconfigurable Automation and Robot Skills
13:30-15:00	TU201	PROCIR-D-25-01665	A Proactive Mobile Robot Material Delivery Method for Complex Assembly Processes	Geng Zhang, Yubin Wang, Yaqi Zhao, Pengcheng Wei, Yi Hao	Reconfigurable Automation and Robot Skills
13:30-15:00	TU201	PROCIR-D-25-01479	Optimizing Action Sequences From Vision-Language-Action Models With Model Predictive Control For Instruction-Guided Human-Robot Collaborative Disassembly	Xurui Bao, Haofei Ma, Yuchen Ji, Pai Zheng, Liqiao Xia	Reconfigurable Automation and Robot Skills

Time	Venue	Manuscript	Paper Title	All Author	Session Topic
13:30-15:00	TU201	PROCIR-D-25-01657	A Prior-Guided Framework For Screw Detection And Registration In Automated Disassembly	Yilin Fang, Kai Huang, Muyao Tan, Junyufeng Chen, Ling Gui, Quan Liu, Zude Zhou	Reconfigurable Automation and Robot Skills
13:30-15:00	TU201	PROCIR-D-26-00021	Intelligent Control Of Collaborative Robot Based On Multimodal Human Motion Recognition For Human-Robot Collaborative Assembly	Lizhong Zhao, Ying Zhu, Lijun Ma, Jihong Yan	Reconfigurable Automation and Robot Skills
13:30-15:00	TU201	PROCIR-D-25-01481	In-situ Milling System Using a Parallel Robot for Large Vacuum Vessel Assembly	Junwei Li, Yong Cheng, Hongtao Pan, Yang Yang, Xuanchen Zhang, Yuntao Song	Reconfigurable Automation and Robot Skills
13:30-15:00	TU107	PROCIR-D-25-01452	Metal Wires Winding By Dual Collaborative Robots Based On Multi-Modal Data And Metal Springback Model	Yiyang Hu, Bitao Yao, Wenjun Xu, Zude Zhou	Robotic Assembly Systems and Manipulation
13:30-15:00	TU107	PROCIR-D-25-01681	A Variable Stiffness End-Effector Design And Process Optimization For High-Quality Robotic Drilling Of CFRP	Yuhao Zhou, Rucheng Xiang, Hongmin Wu, Zhihao Xu, Hailoing Xie, Zhaoyang Liao	Robotic Assembly Systems and Manipulation
13:30-15:00	TU107	PROCIR-D-25-01450	Contact Model-Based Curriculum Reinforcement Learning For Peg-In-Hole Assembly Under Grasp Angle Variations	Qi Chen, Bernd Kuhlenkötter, Weihua Li, Kai Wu	Robotic Assembly Systems and Manipulation
13:30-15:00	TU107	PROCIR-D-25-01317	Towards Human-Like Manipulation: Zero-Shot Part-Granular Semantic Understanding For Robotic Object Cognition	Shufei Li, Ray Wai Man Kong, Xiaoliang Liang, Cheng Liu	Robotic Assembly Systems and Manipulation
13:30-15:00	TU107	PROCIR-D-25-01283	Human-Robot Collaborative Drilling-Riveting System For Aircraft Assembly With AR And Vision Assistance	Yunong Zhai, Yulong Lyu, Dongsheng Li, Yuhui Zhao	Robotic Assembly Systems and Manipulation
13:30-15:00	TU107	PROCIR-D-25-01486	Collaborative control method for 3D printing motion-extrusion of 6-axis robot arm based on speed smoothing and forward compensation	Qinxiang Liu, Qiuju Zhang, Yu Liu	Robotic Assembly Systems and Manipulation
13:30-15:00	Z414	PROCIR-D-25-01434	Augmented Reality And Gamification To Support Training Of Unskilled Workers: A Case Study Of Industrial Cabinet Assembly	Marco Lanzone, Thomas Bezzi, Luca Gualtieri, Patrick Dallasega	Augmented Reality and Human-Centric Operator Support
13:30-15:00	Z414	PROCIR-D-25-01674	Research On The User Trust Variations Under Multiple AR-Guidance Modes In Assembly	Hengrui Guo, Jianwei Niu, Qiangwei Bao	Augmented Reality and Human-Centric Operator Support
13:30-15:00	Z414	PROCIR-D-26-00009	A Biomimetic Underwater Device Based On Piezoresistive Sensors For Real-Time Internal Wave Early Warning In Diving Safety	Jiqing Fu, Menglu Yu, Chunyang Yu, Yuyang Zhang	Augmented Reality and Human-Centric Operator Support

Time	Venue	Manuscript	Paper Title	All Author	Session Topic
13:30-15:00	Z414	PROCIR-D-25-01476	Research On Lower Limb Rehabilitation Experience Design Integrating Augmented Reality And Terrain Simulation Technology	Haolun Xu, Qian Zhou, Yike Zhang, Hanjian Chen, Lu Lin	Augmented Reality and Human-Centric Operator Support
13:30-15:00	Z414	PROCIR-D-25-01418	An Augmented Reality-Enhanced Large Language Model-Based Interactive System For Human-Robot Collaboration	Hao Xu, Linzhen Zhou, Xuanchen Zhou, Pai Zheng	Augmented Reality and Human-Centric Operator Support
13:30-15:00	Z414	PROCIR-D-25-01441	Real-Time Progress Tracking and Error Detection in Manual Disassembly with Computer-Vision-Enabled Projection-Based Spatial AR	Naimul Hasan, Louie Webb, Safia Barikzai, Bugra Alkan	Augmented Reality and Human-Centric Operator Support