List of Publications

Aachen, 19.05.2022

2021

Engemann, Heiko ; Cönen, Patrick ; Dawar, Harshal ; Du, Shengzhi ; Kallweit, Stephan: A robot-assisted large-scale inspection of wind turbine blades in manufacturing using an autonomous mobile manipulator, Applied Sciences. 11 (2021), H. 19. page: 1 – 22, Special Issue "Advances in Industrial Robotics and Intelligent Systems"

2020

Franko, Josef ; Du, Shengzhi ; Kallweit, Stephan ; Duelberg, Enno Sebastian ; Engemann, Heiko: Design of a Multi-Robot System for Wind Turbine Maintenance, Energies. 13 (2020), H. 10. Seite: Article 2552

Engemann, Heiko ; Du, Shengzhi ; Kallweit, Stephan ; Ning, Chuanfang ; Anwar, Saqib: AutoSynPose: Automatic Generation of Synthetic Datasets for 6D Object Pose Estimation, Machine Learning and Artificial Intelligence. Proceedings of MLIS 2020. Amsterdam : IOS Press 2020. page: 89 - 97

2019

Engemann, Heiko ; Badri, Sriram ; Wenning, Marius ; Kallweit, Stephan: Implementation of an Autonomous Tool Trolley in a Production Line, Advances in Service and Industrial Robotics. RAAD 2019. Advances in Intelligent Systems and Computing, vol 980. Cham : Springer 2019. page: 117 - 125

Limpert, Nicolas ; Wiesen, Patrick ; Ferrein, Alexander ; Kallweit, Stephan ; Schiffer, Stefan: The ROSIN Project and its Outreach to South Africa, R&D Journal. 35 (2019). Seite: 1 - 6

Kunkel, Maximilian Hugo ; Gebhardt, Andreas ; Mpofu, Khumbulani ; Kallweit, Stephan: Quality assurance in metal powder bed fusion via deep-learning-based image classification, Rapid Prototyping Journal. 26 (2019), H. 2. page: 259 - 266

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Kunkel, Maximilian Hugo ; Gebhardt, Andreas ; Mpofu, Khumbaulani ; Kallweit, Stephan: Statistical assessment of mechanical properties of selective laser melted specimens of stainless steel, The International Journal of Advanced Manufacturing Technology. 98 (2018), H. 5-8. page: 1409 - 1431

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2017

Engemann, Heiko ; Wiesen, Patrick ; Kallweit, Stephan ; Deshpande, Harshavardhan ; Schleupen, Josef: Autonomous mobile manipulation using ROS, International Conference on Robotics in Alpe-Adria Danube Region RAAD 2017; Mechanisms and Machince Science book series, Vol 49., Advances in Service and Industrial Robotics. Cham : Springer 2018. Seite: 389 - 401

Schleupen, Josef ; Engemann, Heiko ; Bagheri, Mohsen ; Kallweit, Stephan ; Dahmann, Peter: Developing a climbing maintenance robot for tower and rotor blade service of wind turbines, Advances in Robot Design and Intelligent Control : Proceedings of the 25th Conference on Robotics in Alpe-Adria-Danube Region (RAAD16). Cham : Springer 2017. page: 310 - 319

2016

Kleine Harald; Kallweit, Stephan; Michaux, Frank; Havermann, Marc; Olivier, Herbert: PIV Measurement of Shock Wave Diffraction, International Symposium on Applications of Laser Techniques to Fluid Mechanics, 2016, Lissabon

Schleupen, Josef ; Engemann, Heiko ; Bagheri, Mohsen ; Kallweit, Stephan: The potential of SMART climbing robot combined with a weatherproof cabin for rotor blade maintenance, 17th European Conference on Composite Materials – ECCM, Munich, Germany. 2016. page: 1 - 8

Kallweit, Stephan; Dahmann, Peter; Schleupen, Josef; Bagheri, Mohsen; Engemann Heiko: Developing a climbing maintenance robot for tower and rotor blade service of wind turbines, RAAD 2016 (in preparation, paper accepted)

Kallweit, Stephan; Schleupen, Josef; Dahmann, Peter; Bagheri, Mohsen; Engemann, Heiko: Entwicklung eines Kletterroboters zur Diagnose und Instandsetzung von Windenergieanlagen (SMART), Automatisierung im Fokus von Industrie 4.0 : Tagungsband AALE 2016 ; 13. Fachkonferenz, Lübeck. München : DIV Deutscher Industrieverlag GmbH 2016. - 271 Seiten : Illustrationen page: 207 - 212

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Kallweit, Stephan; Gottschalk, Michael; Walenta, Robert: ROS based safety concept for collaborative robots in industrial applications, Advances in robot design and intelligent control : proceedings of the 24th International Conference on Robotics in Alpe-Adria-Danube Region (RAAD). (Advances in intelligent systems and computing ; 371). Cham : Springer International Publishing 2016. page: 27 - 35

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Ferrein, Alexander; Kallweit, Stephan; Scholl, Ingrid; Reichert, Walter: Learning to Program Mobile Robots in the ROS Summer School Series, Proceedings 6th International Conference on Robotics in Education (RiE 15). 2015. - 6 S.

Gregorio, Fabrizio de; Fatigati, Giovanni; Kallweit, Stephan: Tiltrotor airframe flow field characterization by SPIV, 11th International Symposium on Particle Image Velocimetry - PIV15 , Santa Barbara, California, Sept 14-16, 2015. 2015. - 15 S.

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Ferrein, Alexander; Kallweit, Stephan; Lautermann, Mark: Towards an autonomous pilot system for a tunnel boring machine, 5th Robotics and Mechatronics Conference of South Africa (ROBMECH) : 26 - 27 November 2012 ; CSIR International Conference Centre Gauteng South Africa. Piscataway, NJ : IEEE 2012.

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