Kategória: Aplikačný typ

Názov výsledku: Systém vyhľadávania, sledovania a riadenia procesu streľby
Anglicky názov výsledku: System for Localization, Tracking and Fire Process Control
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Typ a číslo projektu: Zmluva o dielo č. EOU 806/18
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Anotácia výsledku:

The system for online localization tracking and fire process control has been worked out. The Fire Process Control consists of several problem oriented image processing modules aimed to reveal and recognize characteristic patterns and to track the motion of the selected object. The system is working autonomously in the Search mode trying to offer recognized objects for tracking. In case of unsuccessful recognition, the operator can point out an object on the screen to start the Track mode. A calculation of the Pearson's Cross Correlation Coefficient between the pattern and the corresponding area of interest under the pattern has been decomposed and efficiently implemented in the Fast Fourier Transform domain in order to localize the tracked object repeatedly in real time.

Hlavné scientometrické výstupy:

1. Dobrovodsky, K., Andris, P., Cooperative Distance Measurement for an Anti-aircraft Battery. In Advances in Service and Industrial Robotics: Proceedings of the 26th Conference on Robotics in Alpe-Adria-Danube Region, RAAD 2017. – Springer; Switzerland, 2018, Mechanisms and Machine Science, vol. 49, p. 95-101. DOI 10.1007/978-3-319-61276-8. Softcover ISBN 978-3-319-61275-1. ISSN 2211-0984.
2. Dobrovodsky, K., Andris, P., Real Time Sub Image Localization for Tracking. In: Advances in Service and Industrial Robotics. Proceedings of the 27th Conference on Robotics in Alpe-Adria-Danube Region, (RAAD 2018). – Springer 2019, ISBN 978-3-030-00231-2, ISBN 978-3-030-00232-9 (eBook).
3. Dobrovodsky, K., Andris, P., Adaptive Recognition for Tracking of Moving Objects. In: Proceedings of the 28th Conference on Robotics in Alpe-Adria-Danube Region, RAAD 2019. - Jun 19 - 21, Kaiserslautern, Germany, 2019.
4. Dobrovodsky, K., Andris, P., Adaptive Recognition for Tracking of Moving Objects. In: Advances in Service and Industrial Robotics. Proceedings of the 28th Conference on Robotics in Alpe-Adria-Danube Region (RAAD 2019). – Springer Nature Switzerland AG 2020, Printed by Printforce, the Netherlands, ISBN 978-3-030-19647-9, ISBN 978-3-030-19648-6 (eBook). ISSN2194-5357, ISSN 2194-5365 (electronic)