

Meno a priezvisko: doc. Ing. Rastislav Pirník, PhD.

Odbor habilitačného konania a inauguračného konania: automatizácia

Univerzita: Žilinská univerzita v Žiline

Fakulta: Fakulta elektrotechniky a informačných technológií

Katedra: Katedra riadiacich a informačných systémov

Zoznam najvýznamnejších vedeckých prác

Názov	Citácie	Podiel [%]	Kód Databáza
1. Estimation of the speed from the odometer readings using optimized curve-fitting filter /Dusan Nemeč ... [et al.]. In: IEEE Sensors Journal : a Publication of the IEEE Sensors Council. - New York : IEEE SensorsCouncil. - ISSN 1530-437X. - Roč. 21, č. 14 (2021), s. 15687-15695 [print, online]. Zaradené v: Current Content Connect ; SCOPUS ; Web of Science Core Collection (2021 Q1, IF 4,325) [Nemeč Dušan (20%) - Hruboš Marián (25%) - Janota Aleš (25%) - Pirník Rastislav (25%) -Gregor Michal (5%)]	2	25%	ADC CC WOS SCOPUS
2. Noninvasive passenger detection comparison using thermal imager and ip cameras /Pavol Kuchár ... [et al.]. In: Sustainability. - Bazilej : Multidisciplinary Digital Publishing Institute. - [online]. - ISSN 2071-1050 (online). - Roč. 13, č. 22 (2021), s. [1-17] [online]. Zaradené v: Current Content Connect ; SCOPUS ; Web of Science Core Collection (2021 Q2, IF 3,889) [Kuchár Pavol (25%) - Pirník Rastislav (25%) - Tichý Tomáš (10%) - Rástočný Karol (25%) -Skuba Michal (10%) - Tettamanti Tamás (5%)]	6	25%	ADC CC WOS SCOPUS
3. Spherical robots for special purposes : a review on current possibilities / Marek Bujňák ...[et al.]. In: Sensors. - Bazilej : Multidisciplinary Digital Publishing Institute. - [online, print]. - ISSN 1424-3210. - Roč. 22, č. 4 (2022), s. [1-36] [online, print]. Zaradené v: Current Content Connect ; SCOPUS ; Web of Science Core Collection (2022 Q2, IF 3,9) [Bujňák Marek (25%) - Pirník Rastislav (25%) - Rástočný Karol (4%) - Janota Aleš (4%) - NemečDušan (33%) - Kuchár Pavol (4%) - Tichý Tomáš (4%) - Łukasik Zbigniew (1%)]	13	25%	V3 CC WOS SCOPUS
4. Human factor analysis of the railway traffic operators / Aleš Janota ... [et al.]. In: Machines. - Basel : Multidisciplinary Digital Publishing Institute. - [online]. - ISSN 2075-1702(online). - Roč. 10, č. 9 (2022), s. [1-25] [online]. Zaradené v: Current Content Connect ; Web of Science Core Collection (2022 Q2, IF 2,6) [Janota Aleš (45%) - Pirník Rastislav (25%) - Žďánsky Juraj (25%) - Nagy Peter (5%)]	1	25%	V3 CC WOS SCOPUS
5. GNSS based low-cost magnetometer calibration / Ján Andel ... [et al.]. In: Sensors. - Bazilej : Multidisciplinary Digital Publishing Institute. - [online, print]. - ISSN 1424-3210. - Roč. 22, č. 21 (2022), s. [1-10] [online, print]. Zaradené v: Current Content Connect ; SCOPUS ; Web of Science Core Collection (2022 Q2, IF 3,9)	1	25%	V3 CC WOS SCOPUS

[Andel Ján (25%) - Šimák Vojtech (25%) - Kanáliková Alžbeta (25%) - Pirník Rastislav (25%)]			
6. Passenger occupancy estimation in vehicles : a review of current methods and research challenges / Pavol Kuchár ... [et al.]. In: Sustainability. - Bazilej : Multidisciplinary Digital Publishing Institute. - [online]. - ISSN 2071-1050 (online). - Roč. 15, č. 2 (2023), s. [1-27] [online]. Zaradené v: Current Content Connect ; Web of Science Core Collection (2022 Q2, IF 3,9) [Kuchár Pavol (33%) - Pirník Rastislav (25%) - Janota Aleš (25%) - Malobický Branislav (7%) - Kubík Jozef (5%) - Šišmišová Dana (5%)]	1	25%	V3 CC WOS SCOPUS
7. Searching for collisions between mobile robot and environment / Marián Hruboš ... [et al.]. In: International journal of advanced robotic systems. - ISSN 1729-8814. - Vol. 13, (2016), online[11] s. Zaradené v: Current Content Connect (2016 Q3, IF 0,987) [Hruboš Marián (20%) - Svetlík Jozef (10%) - Nikitin Yury (1%) - Pirník Rastislav (15%) - Nemeč Dušan (15%) - Šimák Vojtech (15%) - Janota Aleš (6%) - Hrbček Jozef (9%) - Gregor Michal	10	15%	ADC CC WOS SCOPUS
8. Control of the mobile robot by hand movement measured by inertial sensors / Dušan Nemeč ... [et al.]. In: Electrical engineering. - ISSN 0948-7921. - Vol. 99, no. 4 sp. iss. (2017), s. 1161-1168. Zaradené v: Current Content Connect (2017 Q3, IF 1,269) [Nemeč Dušan (25%) - Janota Aleš (20%) - Gregor Michal (20%) - Hruboš Marián (20%) - Pirník Rastislav (15%)]	12	15%	ADC CC WOS SCOPUS
9. Mutual acoustic identification in the swarm of e-puck robots / Dušan Nemeč ... [et al.]. In: International journal of advanced robotic systems. - ISSN 1729-8814. - Vol. 14, iss. 3 (2017), online, [10] s. Zaradené v: Current Content Connect (2017 Q4, IF 0,952) [Nemeč Dušan (30%) - Janota Aleš (15%) - Hruboš Marián (20%) - Gregor Michal (20%) - Pirník Rastislav (15%)]	2	15%	ADC CC WOS SCOPUS
10. Improving the Hybrid A* method for a non-holonomic wheeled robot / Dušan Nemeč ... [et al.]. In: International Journal of Advanced Robotic Systems. - Viedeň : Technische Universität Wien. - [print, online]. - ISSN 1729-8806. - Roč. 16, č. 1 (2019), s. [1-12] [print]. Zaradené v: Current Content Connect ; SCOPUS ; Web of Science Core Collection (2019 Q4, IF 1,482) [Nemeč Dušan (20%) - Gregor Michal (20%) - Bubeníková Emília (20%) - Hruboš Marián (20%) - Pirník Rastislav (20%)]	13	20%	ADC CC WOS SCOPUS
11. Sensor fusion for creating a three-dimensional model for mobile robot navigation / Marián Hruboš ... [et al.]. In: International Journal of Advanced Robotic Systems. - Viedeň : Technische Universität Wien. - [print, online]. - ISSN 1729-8806. - Roč. 16, č. 4 (2019), s. 1-12 [print, online]. Zaradené v: SCOPUS ; Web of Science Core Collection ; Current Content Connect Collection (2019 Q4, IF 1,482) [Hruboš Marián (23%) - Nemeč Dušan (23%) - Janota Aleš (10%) - Pirník Rastislav (10%) - Bubeníková Emília (10%) - Gregor Michal (10%) - Juhásová Bohuslava (7%) - Juhás Martin (7%)]	3	10%	ADC CC WOS SCOPUS
12. Analysis of predictive maintenance for tunnel systems / Tomáš Tichý ... [et al.]. In: Sustainability. - Bazilej : Multidisciplinary Digital Publishing Institute. - [online]. - ISSN 2071-1050 (online). - Roč. 13, č. 7 (2021), s. [1-17] [online]. Zaradené v: Current Content Connect ; SCOPUS ; Web of Science Core Collection Collection (2021 Q2, IF 3,889) [Tichý Tomáš (30%) - Brož Jiří (30%) - Bělinová Zuzana (20%) - Pirník Rastislav (20%)]	7	20%	ADC CC WOS SCOPUS

13. TICHY, T., BROZ, J., STEFAN, J., & PIRNIK, R. (2023). Failure analysis and data-driven maintenance of road tunnel equipment. Results in Engineering, 18, OI10.1016/j.rineng.2023.101034	2	25%	V3 WOS SCOPUS
14. BUJŇÁK, M.; PIRNÍK, R.; KUCHAR, P.; RÁSTOČNÝ, K. Assessing the Risk of Spreading COVID-19 in the Room Utilizing Low-Cost Monitoring System. Appl. Syst. Innov. 2023, 6, 40. https://doi.org/10.3390/asi6020040	1	25%	V3 WOS SCOPUS
15. NEMEC D., ADAMKOVIC D., HRUBOS M., PIRNIK R. and MIHALIK M., "Fast Two-Wheeled Balancing Robot," 2021 22nd International Carpathian Control Conference (ICCC), Velké Karlovice, Czech Republic, 2021, pp. 1-9, doi: 10.1109/ICCC51557.2021.9454659.	0	20%	V2 WOS SCOPUS
16. PIRNÍK, R. [et al.]. Integration of inertial sensor data into control of the mobile platform In: PROCEEDINGS OF THE 2015 FEDERATED CONFERENCE ON SOFTWARE DEVELOPMENT AND OBJECT TECHNOLOGIES Book Series: Advances in Intelligent Systems and Computing Volume: 511 Pages: 271-282 DOI: 10.1007/978-3-319-46535-7_21 Published: 2017	28	40%	AFD WOS SCOPUS
17. JANOTA, A., [et al.]. Knowledge-based approach to selection of weight-in-motion equipment / In: Challenge of transport telematics : 16th international conference on Transport systems telematics, TST 2016 : Katowice-Ustroń, Poland, March 16-19, 2016. - Cham : Springer, 2016 - (Communications in computer and information science, Vol. 640. - ISSN 1865-0929). - ISBN 978-3-319-49645-0. - S. 1-12.	11	20%	AFC WOS SCOPUS
18. DADO, M., [et al.]. Internet of Things as Advanced Technology to Support Mobility and Intelligent Transport. INTERNET OF THINGS: IOT INFRASTRUCTURES, IOT 360, PT II Book Series: Lecture Notes of the Institute for Computer Sciences Social Informatics and Telecommunications Engineering Volume: 170 Pages: 99-106 DOI: 10.1007/978-3-319-47075-7_12 Published: 2016	5	15%	AEC WOS SCOPUS
19. NEMEC, D., [et al.]. Ergonomic remote control of the mobile platform by inertial measurement of the hand movement / In: ELEKTRO 2016 : 11th international conference : Štrbské Pleso - High Tatras, May 16-18, 2016 Slovak Republic. - [S.l.] : IEEE, 2016. - ISBN 978-1-4673-8698-2. - CD-ROM, s. 445-449.	2	20%	AFD WOS SCOPUS
20. NEMEC, D., [et al.]. Classification of the road infrastructure objects based on mobile two-dimensional laser scanning / In: ELEKTRO 2016 : 11th international conference : Štrbské Pleso - High Tatras, May 16-18, 2016 Slovak Republic. - [S.l.] : IEEE, 2016. - ISBN 978-1-4673-8698-2. - CD-ROM, s. 450-455.	2	17%	AFD WOS SCOPUS
21. BUBENÍKOVÁ, E. - PIRNÍK, R. - HOLEČKO, P., FRANEKOVÁ, M.: The ways of streamlining digital image processing algorithms used for detection of lines in transport scenes video recording. In: IFAC Papers Online. ISSN 2405-8963, 2015, vol. 48, iss. 4, s. 174-179.	5	25%	AFC WOS SCOPUS
22. HRUBOS Marian,, PIRNIK, Rastislav and NEMEC, Dušan. (2019). Detection Of The Road Defects In The Tunnel Area. 1-4. 10.1109/CarpathianCC.2019.8766002.	0	33%	AFC WOS SCOPUS
23. HALGÁŠ, J., - JANOTA, A., - PIRNÍK, R., AND HOLEČKO, P., Creating a 3D parking area design via a mobile measurement platform In Carpathian Control Conference (ICCC), 2014 15th International IEEE, ISBN: 978-1-4673-4488-3, S. 145-148.	0	25%	AFC WOS SCOPUS
24. HRUBOŠ, M., - JANOTA, A., - PIRNÍK, R., Road surface measurement and visualization based on data from the laser scanner. In Carpathian Control Conference (ICCC), 2014 15th International IEEE, ISBN: 978-1-4673-4488-3, S. 168-173. 2	2	20%	AFC WOS SCOPUS
25. BUBENÍKOVÁ, E. - HOLEČKO, P. - PIRNÍK, R.: Optimisation of video-data transmission in telematic system / Emilia In: Advances in electrical and electronic engineering. - ISSN 1336-1376. - Vol. 11, no. 2 spec. iss. (2013), p. 123-134.	2	33%	ADM WOS SCOPUS
26. GAVULOVÁ, A. - PIRNÍK, R. - HUDEC, R. : Technical support of traffic control system of Slovak agglomerations in NaTIS project. In: Modern transport	8	40%	AFC WOS

telematics11th international conference on transport systems telematics, TST 2011, Katowice-Ustrón, Poland, October 2011, selected papers. - Berlin Heidelberg : Springer-Verlag, 2011 (Communications in computer and information science, 239. - ISSN 1865-0929). - ISBN 978-3-642-24659-3. - S. 382-391.			SCOPUS
27. SPALEK, J. – DOBRUCKÝ, B. – LUSKOVÁ, M. – PIRNÍK, R. Modeling of traffic flows of suburban agglomerations: Technical and social aspects, applications. In: Knowledge Generation, Communication and Management = KGCM 2008 : the 2nd International conference : June 29th - July 2nd, 2008 - Orlando, Florida, USA : In the context of the 12th WMSCI 2008. - [S.l.] : International Institute of Informatics and Systemics, 2008. - ISBN 978-1-934272-34-3. - [6 p.].	0	30%	AFC WOS SCOPUS
28. DOBRUCKÝ, B., LUSKOVÁ, M., - ŠIMÁK, L., - PIRNÍK, R.. Management of specified threats and environmental risk events using information- and communication support tools. In: The 11th World multi-conference on Systemics, Cybernetics and Informatics, Orlando : ISAS, 2007, ISBN 978-1-934272-14-5, p. 319-323	1	25%	AFC WOS SCOPUS
29. GREGOR M., PIRNÍK R., NEMEC D.,. Transfer learning for classification of parking spots using residual networks In: TRANSCOM 2019 : conference proceedings : conference proceedings / Ján Bujňák, Mario Guagliano. - 1. vyd. - Amsterdam : Elsevier Science, 2019. - 5000 s. [online] - (ISSN 2352-1465, Transportation Research Procedia, Vol. 40. - ISSN 2352-1465). - ISSN 2352-1465. - s. 1327-1334 [online].	5	20%	AFC WOS SCOPUS
30. GREGOR M., NEMEC D., JANOTA A., PIRNÍK R.. A visual attention operator for playing Pac-Man In: ELEKTRO 2018 : conference proceedings : conference proceedings / Peter Hockicko, Jozef Dubovan and Miroslav Markovic. - 1. vyd. - Danvers : Institute of Electrical and Electronics Engineers, 2018. - 100 s. [USB-key, online, CD-ROM, print]. - ISBN 978-1-5386-4758-5. - s. [1-6] [USB-key, online].	4	25%	AFC WOS SCOPUS
31. NEMEC D., JANOTA A. and PIRNÍK R.. System for monitoring and guarding vehicles on parking areas . In: Smart solutions in today's transport : 17th international conference on Transport systemstelematics, TST 2017 : Katowice - Ustrón, Poland, 5 - 8 April, 2017. - Berlin : Springer-Verlag,2017 - (Communications in computer and information science, 715. - ISSN 1865-0929). - ISBN 978-3-319-66250-3. - S. 307-319.	0	33%	AFC WOS SCOPUS
32. CIGÁNEK, P. - PIRNÍK, R. – BRONČEKOVÁ, T. New ICT trends in e-Health In: Advances in electrical and electronic engineering. - ISSN 1336-1376. - Vol. 6, No. 2 (2007), p. 90-93.	0	33%	ADF WOS

Názov	Podiel [%]	Kód
1. PIRNÍK, Rastislav – JANOTA, Aleš – BUJŇÁK, Marek. <i>Mobilná robotika pri mimoriadnych udalostiach v dopravnom tuneli</i> . 1 vyd. Žilina : Žilinská univerzita, 2023. - 100 s., ISBN 978-80-554-2055-4	33,34% 3,39AH	V1
2. PIRNÍK Rastislav - TICHÝ Tomáš - NAGY Peter. <i>Telematická podpora pri mimoriadnych udalostiach v dopravnom tuneli</i> . 1 vyd. Žilina : Žilinská univerzita, 2023. - 111 s. ISBN 978-80-554-2056-1	33,34% 3,63AH	V1
3. DADO, Milan a kol. <i>Technológie a služby inteligentnej dopravy</i> . 1. vyd. Žilina : Žilinská univerzita, 2007. - 378 s., ISBN 978-80-8070-691-3.	2.272% 0,52AH	V1 AAB

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