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Research outputs

Introducing the concept of grades of automation for shunting operations

Reichmann, M., Himmelbauer, G. S., Wagner, A., Zajicek, J., Stadlmann, B., Wancura, H., Furian, N. & Vössner, S., Mar 2025, In: *Journal of Rail Transport Planning and Management*. 33, 100500.

Conceptual Design of Shunting Automation Elements Utilising the Digital Automatic Coupler

Himmelbauer, G. S., Hasenleithner, T., Egger, M., Skok, B., Kaltenbrunner, A. & Stadlmann, B., Sept 2024, *Proceedings of the Sixth International Conference on Railway Technology: Research, Development and Maintenance*. Pombo, J. (ed.). Edinburgh, UK: Civil-Comp Press, Vol. CCC 7.

Conceptual design and evaluation of sensor technology for automatic uncoupling of railroad wagons

Himmelbauer, G. S., 17 May 2023. 16 p.

Visual odometry and mapping under poor visibility conditions using a stereo infrared thermal imaging system.

Edlinger, R., Zauner, G., Himmelbauer, G. S. & Nüchter, A., 16 Jan 2023, *Electronic Imaging*. 5 ed. IS&T 7003 Kilworth Lane, Springfield, VA 22151 USA: Society for Imaging Science and Technology, Vol. 35. p. 1-7 7 p. (IS and T International Symposium on Electronic Imaging Science and Technology).

Projects

DACIO - Digital Automated Coupling in Infrastructure Operations

Stadlmann, B. (PI), Egger, M. (CoPI), Penkner, T. (Col), Schneider, G. R. (Col), Hasenleithner, T. (Col) & Himmelbauer, G. S. (Col)

Mobilität der Zukunft

01.07.2019 → 31.03.2025

TRANS4M-R - Transforming Rail Freight in Europe

Stadlmann, B. (PI), Widmann, R. (Col), Lorenz, R. (Col), Egger, M. (CoPI) & Himmelbauer, G. S. (Col)

HORIZON Research and Innovation Actions

01.07.2022 → 30.06.2026