Methods and AI solutions for anomaly detection and potential use cases in modern work environment

Roberts Volkovics, PhD candidate Vidzeme University of Applied Sciences (ViA)

PhD studies in methods and AI solutions for anomaly detection, research done in different domains by creating models for different use cases.

Research projects

- 2023 Anomaly detection review of methods, tools and algorithms. Roberts Volkovičs Modelling of sociotechnical systems. Vidzeme University of Applied Sciences Valmiera, Latvia. This research was funded by the European Commission, Research Executive Agency grant number 101079206, "Twinning in Environmental Data and Dynamical Systems Modelling for Latvia"
- 2024 Environmental Data and Digital Twins for Road Traffic Safety in Rural Areas, Roberts Volkovičs Modelling of sociotechnical systems Vidzeme University of Applied Sciences Valmiera, Latvia, Viesturs Bambāns Modelling of sociotechnical systems Vidzeme University of Applied Sciences Valmiera, Latvia, Dr.sc.ing. Ginta Majore Modelling of sociotechnical systems Vidzeme University of Applied Sciences Valmiera, Latvia. This research was funded by the European Commission, Research Executive Agency grant number 101079206, "Twinning in Environmental Data and Dynamical Systems Modelling for Latvia"

Research papers

- 2023 Anomaly detection review of methods, tools and algorithms. Roberts Volkovičs Modelling of sociotechnical systems. Vidzeme University of Applied Sciences Valmiera, Latvia.
- 2024 Environmental Data and Digital Twins for Road Traffic Safety in Rural Areas, Roberts Volkovičs Modelling of sociotechnical systems Vidzeme University of Applied Sciences Valmiera, Latvia, Viesturs Bambāns Modelling of sociotechnical systems Vidzeme University of Applied Sciences Valmiera, Latvia, Dr.sc.ing. Ginta Majore Modelling of sociotechnical systems Vidzeme University of Applied Sciences Valmiera, Latvia.

Conference presentations

- 2023 Environment. Technology. Resources. Rezekne, Latvia Proceedings of the 14th International Scientific and Practical Conference. Anomaly detection - review of methods, tools and algorithms. Roberts Volkovičs Modelling of sociotechnical systems. Vidzeme University of Applied Sciences Valmiera, Latvia.
- 2024 Environment. Technology. Resources. Rezekne, Latvia Proceedings of the 15th International Scientific and Practical Conference. Environmental Data and Digital Twins for Road Traffic Safety in Rural Areas, Roberts Volkovičs Modelling of sociotechnical systems Vidzeme University of Applied Sciences Valmiera, Latvia, Viesturs Bambāns Modelling of sociotechnical systems Vidzeme University of Applied Sciences Valmiera, Latvia, Dr.sc.ing. Ginta Majore Modelling of sociotechnical systems Vidzeme University of Applied Sciences Valmiera, Latvia.