

## Preface

Information technology deals with applied aspects of computing and emphasises application of computing to solve challenges faced by the society and different organisations. Therefore, it strongly overlaps with related disciplines and management science in particular. The importance of the cross-sectional perspective continues to increase due to the increasing complexity of information technology solutions delivered to users and businesses as well as due to the transformational power of information technology. Information Technology and Management Science is a scientific journal of the Institute of Information Technology of Riga Technical University that focuses on these cross-disciplinary aspects. Volume 19 contains papers on various aspects of data intensive applications, decision-making and information technology project management.

Romanuke, in his article *“Evaluation of Payoff Matrices for Non-cooperative Games via Processing of Binary Expert Estimations”*, focuses on collaborative aspects of decision-making. Radionovs and Užga-Rebrovs in the paper *“Fuzzy Analytical Hierarchy Process for Ecological Risk Assessment”*, Vynokurova et al. in the article *“Adaptive Fuzzy Clustering of Short Time Series with Unevenly Distributed Observations in Data Stream Mining Tasks”*, Užga-Rebrovs and Kuļešova in the paper *“Using Fuzzy Probability Weights in Cumulative Prospect Theory”* as well as Grabusts, Borisovs and Aleksejeva in their article *“Decision Tree Creation Methodology Using Propositionalized Attributes”* propose new methods for developing decision-support solutions on the basis of fuzzy and neural network techniques. Applications of data intensive techniques in earth sciences, sports and healthcare are analysed by Stepčenko and Čižovs in their paper *“Markov Chain Modelling for Short-Term NDVI Time Series Forecasting”*, Namatēvs et al. in the paper *“Neural Network Modelling for Sports Performance Classification as a Complex Socio-Technical System”* as well as Balan and Otto in their article *“Big Data Analysis of Home Healthcare Services”*.

Challenges of complexity of information technology implementation and adoption are investigated in several papers devoted to information technology project management. Gržibovska et al. in their paper *“Impact of Requirements Elicitation Processes on Success of Information System Development Projects”* report a case study analysing relationships among project management methodology used, requirements engineering methods and project characteristics. The paper *“Efficiency Measurement of Project Management Software Usage at State Social Insurance Agency”* by Riņģis and Bērziša assesses a role of project management software in achieving project success.

Data integration and management issues are addressed in a group of papers devoted to the Internet of Things (*“Case Study: IoT Data Integration for Higher Education Institution”* by Kampars et al.; *“Internet of Things: Structure, Features and Management”* by Filičevs et al.), data base design (*“Improved Database Schema Development for OWL2”* by Gorskis), data integration solutions (*“Comparison of SOAP and REST Based Web Services Using Software Evaluation Metrics”* by Tihomirov and Grabis) and data preprocessing with applications in sign language recognition (*“Review of Data Preprocessing Methods for Sign Language Recognition Systems based on Artificial Neural Networks”* by Zorins and Grabusts).

Editorial Board