

Table of Contents

Exploring Blockchain for Public Sector Recruitment <i>Konstantinos Siassiakos, Foteini Bompoti, Thanos Papaioannou, Kalliopi Stagka, Panagiotis Zarafidis, and Anna Pavli</i>	1
Blockchain Applications in Education: A Case Study in Lifelong Learning <i>Alexander Mikroyannidis</i>	4
Using Blockchain, Semantics and Data Analytics to Optimise Qualification Certification, Recruitment and Competency Management: a Landscape Review <i>Christos Kontzinos, Ourania Markaki, Panagiotis Kokkinakos, Vagelis Karakolis, Stavros Skalidakis, and John Psarras</i>	9
Decentralised Qualifications' Verification and Management for Learner Empowerment, Education Reengineering and Public Sector Transformation: The QualiChain project <i>Christos Kontzinos, Ourania Markaki, Panagiotis Kokkinakos, Vagelis Karakolis, Stavros Skalidakis, and John Psarras</i>	16
Towards A Blockchain-based Decentralised Educational Landscape <i>Niaz Chowdhury, Manoharan Ramachandran, Allan Third, Alexander Mikroyannidis, Michelle Bachler, and John Domingue</i>	21
Digital Transformation of Education Credential Processes and Life Cycles - A Structured Overview on Main Challenges and Research Questions <i>Ingo R. Keck, Maria-Esther Vidal, and Lambert Heller</i>	27
Fingers and Toes: A Hidden BioMetric Story <i>Rachel Stange</i>	31
Exploitation of Radio Frequency Technologies Through the use of Microcontrollers <i>Daniel Joachim</i>	37
Incorporating Cyber Competencies in K-12 <i>Rachel Stange</i>	42
Mobile Application for University Courses of Journalism and Research <i>Claudia A. Lerma-Noriega, Maria Leticia Flores-Palacios, and Genaro Rebolledo-Mendez</i>	47
New Learning Method for Structural Understanding in Architecture Based on Gamification <i>Perla Rafael Santa Ana Lozada and Aleksandra Krstikj</i>	51
Addressing Prerequisites for STEM Classes Using an Example of Linear Algebra for a Course in Machine Learning	57

Genady Grabarnik, Luiza Kim-Tyan, and Serge Yaskolko

DelphiCare 6.0 63
Rene Joaquin Diaz Martinez, Rafaela Villalpando Hernandez, Yamilin Aracely Zamora Enriquez, Juan Francisco Medina Leal, and Cesar Eduardo Cuevas Garza

Creating Free, Interactive Resources to Support Student Success: Pilot Programs and Preliminary Findings 67
Tamara Powell

Solution for Real Problems through Research by Undergraduate Students 73
Rene Joaquin Diaz Martinez, Rafaela Villalpando Hernandez, Ramiro Saldana Acosta, Juan Francisco Medina Leal, Liliana Lizeth Luevano Rosales, and Irene Reynoso Anguiano

Intelligent Tutoring Systems for Generation Z's Addiction 77
Ioana R. Goldbach and Felix G. Hamza-Lup

Evaluating Virtual Reality as a Learning Resource: An Insight into User Experience, Usability and Learning Experience 81
Katherina Gallardo and Nohemi Rivera

DEKXTROSE: An Education 4.0 Mobile Learning Approach and Object-Aware App Based on a Knowledge Nexus 86
Roy Oberhauser

Conversational Robot for Practice Interviews in Creative Industries 92
Maria Leticia Flores-Palacios, Claudia Alicia Lerma-Noriega, and Genaro Rebolledo-Mendez

Rethinking Self-directed Learning for Information Managers 96
Gerrit Wucherpennig, Monika Steinberg, and Anke Wittich

Conversational Agent in Mobile Assisted Language Learning for Adult Immigrants 103
Giorgio Robino, Simone Torsani, and Fabrizio Ravicchio