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Members -- 8. Intelligent Technologies and Applications -- Track Co-chairs -- PC Members -- 9. Cloud Computing and Service-Oriented Applications -- Track Co-chairs -- PC Members -- 10. Ontology and Semantic Web -- Track Co-chairs -- PC Members -- 11. IoT and Social Networking -- Track Co-chairs -- PC Members -- 12. Embedded Systems and Wearable Computers -- Track Co-chairs -- PC Members -- IMIS-2021 Reviewers -- IMIS-2021 Keynote Talks -- Asking AI Why: Explainable Artificial Intelligence Jayh (Hyunhee) Park Myongji University, Yongin, Korea -- Co-evolution of Semantic and Blockchain Technologies Antonio Esposito University of Campania "Luigi Vanvitelli", Aversa, Italy -- Contents -- Implementation of a VR Preview Simulation System by Capturing the Human Body Movements -- 1 Introduction -- 2 Research Objective -- 3 System Configuration -- 3.1 VR Preview Space Control Function -- 3.2 VR Preview Space -- 3.3 Avatar Control Function. 3.4 Object Storage -- 4 System Architecture -- 5 VR Preview Simulation System -- 5.1 Walk-Through Function -- 5.2 Door/Window Opening/Closing Function -- 5.3 Interior Layout Function -- 6 Functionality Evaluation -- 7 Conclusion -- References -- Projection Region Detection Model Based on BASNet -- 1 Introduction -- 2 Related Work -- 2.1 Traditional Salient Object Detection Methods -- 2.2 Salient Object Detection Based on Deep Learning -- 3 CS-BASNet -- 3.1 CS-BASNet Architecture -- 3.2 Attention Module -- 3.3 Loss Function -- 4 Experimental Analysis -- 4.1 Dataset -- 4.2 Experimental Setup -- 4.3 Evaluation Metrics -- 4.4 Evaluation of BASNet and CS-BASNet -- 5 Conclusion -- References -- Analysis of Epidemic Events Based on Event Evolutionary Graph -- 1 Introduction -- 2 Related Work -- 3 Proposed Framework -- 3.1 Design Knowledge Graph Based on EEG -- 3.2 Event Extraction -- 3.3 Relationship Recognition -- 4 Experiments -- 5 Conclusions -- References -- Proposal and Development of Anonymization Dictionary Using Public Information Disclosed by Anonymously Processed Information Handling Business Operators -- 1 Introduction -- 1.1 Anonymously Processed Information -- 1.2 Definition of Terms -- 1.3 Aims of This Paper -- 2 Motivation and Related Works -- 3 Development of Anonymization Dictionary -- 3.1 Overview -- 3.2 Construction Procedure for Anonymization Dictionary -- 4 Evaluation -- 4.1 Evaluation Method -- 4.2 Scenario-Based Evaluation -- 5 Discussion -- 5.1 Synonym Retrieval -- 5.2 Automatic Update -- 5.3 Limitation -- 6 Conclusion -- References -- VANETs Road Condition Warning and Vehicle Incentive Mechanism Based on Blockchain -- 1 Introduction -- 2 VANETs Road Condition Warning and Vehicle Incentive Mechanism Based on Blockchain -- 2.1 System Architecture -- 2.2 Vehicle Certification -- 2.3 Road Condition Warning. 2.4 Reward and Punishment Mechanism -- 3 Security Analysis -- 3.1 Security Analysis -- 3.2 Performance Analysis -- 4 Conclusion -- References -- An Authentication Scheme for Car-Home Connectivity Services in Vehicular Ad-Hoc Networks -- 1 Introduction -- 2 Preliminaries -- 2.1 Zero-Knowledge Proof -- 2.2 Paillier's Homomorphic Encryption -- 3 The Proposed Scheme -- 3.1 Network Model -- 3.2 Construction -- 4 Use Case -- 5 Security Analysis and Performance Analysis -- 5.1 Security Analysis -- 5.2 Performance Analysis -- 6 Conclusions -- References -- Vulnerability Analysis of Software Piracy and Reverse Engineering: Based on Software C -- 1 Introduction -- 2 Related Works -- 3 Analysis of Copyright Protection Technology and Restriction Function of Software C -- 4 Software C Piracy Vulnerability Analysis -- 4.1 License Authentication Vulnerability Analysis -- 5 Conclusion -- References -- PtPeach: Improved Design

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Sommario/riassunto

This book includes proceedings of the 15th International Conference on Innovative Mobile and Internet Services in Ubiquitous Computing (IMIS-2021), which took place in Asan, Korea, on July 1-3, 2021. With the proliferation of wireless technologies and electronic devices, there is a fast-growing interest in Ubiquitous and Pervasive Computing (UPC). The UPC enables to create a human-oriented computing environment where computer chips are embedded in everyday objects and interact with physical world. Through UPC, people can get online even while moving around, thus, having almost permanent access to their preferred services. With a great potential to revolutionize our lives, UPC also poses new research challenges. The aim of the book is to provide the latest research findings, methods, development techniques, challenges, and solutions from both theoretical and practical perspectives related to UPC with an emphasis on innovative, mobile, and Internet services.
