

1. Record Nr.	UNINA9910886096603321
Autore	Nguyen Thi Dieu Linh
Titolo	Proceedings of the International Conference on Intelligent Systems and Networks : ICISN 2024, 22-23 March 2024, Hanoi, Vietnam // edited by Thi Dieu Linh Nguyen, Maurice Dawson, Le Anh Ngoc, Kwok Yan Lam
Pubbl/distr/stampa	Singapore : , : Springer Nature Singapore : , : Imprint : Springer, , 2024
ISBN	9789819755042 9819755042
Edizione	[1st ed. 2024.]
Descrizione fisica	1 online resource (785 pages)
Collana	Lecture Notes in Networks and Systems, , 2367-3389 ; ; 1077
Altri autori (Persone)	DawsonMaurice NgocLe Anh LamKwok Yan
Disciplina	006.3
Soggetti	Computational intelligence Security systems Data mining Internet of things Artificial intelligence Computational Intelligence Security Science and Technology Data Mining and Knowledge Discovery Internet of Things Artificial Intelligence
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Intro -- Contents -- An Efficient Administration for Multiple Firewalls in Cloud Environments -- 1 Introduction -- 2 Related Works -- 3 Proposal Approach -- 4 Implementation -- 5 Conclusion -- References -- Lightweight Rendezvous Model Based on Pruning and Knowledge Distillation for Action Triplet Recognition in Laparoscopic Surgery Videos -- 1 Introduction -- 2 Methodology -- 2.1 Pruning Method -- 2.2 Knowledge Distillation Method -- 3 Experimental Results -- 3.1 Datasets and Learning -- 3.2 Evaluation Metrics -- 3.3 Results of the Pruning Method -- 3.4 Results of the Knowledge Distillation Method --

4 Conclusion -- References -- Design a Remote Monitoring System for NH3 Concentration in Water Using Camera -- 1 Introduction -- 2 System Design -- 2.1 Block Diagram -- 2.2 Circuit Design -- 3 Result -- 4 Conclusion -- References -- Efficient Control of Rotary Inverted Pendulum Systems with T-S Fuzzy Descriptor Models -- 1 Introduction -- 2 T-S Fuzzy Descriptor System -- 3 Control Design -- 4 Simulation Results -- 5 Conclusion -- References -- Swing-Up and Stability Control of a Rotary Inverted Pendulum Through Fuzzy-Based Sliding Mode Control -- 1 Introduction -- 2 System Modelling -- 3 Control Problems -- 3.1 Fuzzy Logic Control (FLC) -- 3.2 Fuzzy-Based Sliding Mode Control -- 4 Simulation and Results -- 5 Conclusion -- References -- Efficient Data Compression on Healthcare Images Using Improved Hadamard Transform Based Filter -- 1 Introduction -- 2 Hadamard Transform -- 3 Proposed Work -- 3.1 Modified Hadamard Architecture -- 3.2 Compression and Decompression Technique -- 3.3 Security Design -- 4 Conclusion -- References -- Feature Selection Based on Top Frequency -- 1 Introduction -- 2 Top Frequency-Based Feature Selection -- 3 Empirical Study -- 3.1 Datasets -- 3.2 Experimental Settings -- 3.3 Results and Discussion -- 4 Related Works.

5 Conclusions -- References -- Applied the MoDWT and STFT Layers to Classify the EEG of Schizophrenia Patients -- 1 Introduction -- 2 Materials and Methods -- 2.1 Schizophrenia Dataset -- 2.2 Models Construction -- 3 Materials and Methods -- 3.1 Experiment Results of MoDWT Layers -- 3.2 Survey the Performance of MoDWT and STFT Layer in the Proposed Model -- 3.3 Comparison with Cutting-Edge Methods -- 4 Conclusions -- References -- Blending of Resolution-Jumping and Beamforming for Enhanced Tomographic Reconstruction -- 1 Introduction -- 2 DBIM Blended by Resolution-Jumping and Beamforming -- 3 Simulation Results -- 4 Conclusions -- References -- Hybrid Path Planning for Mobile Robot Based on Improved A* Fusion Dynamic Window Approach -- 1 Introduction -- 2 GPP Based on Improved A* -- 3 Local Path Planning Based on DWA -- 4 Result and Discussion -- 5 Conclusions -- References -- A Real-Time and Continuous Fall Detection Based on Skeleton Sequence -- 1 Introduction -- 2 Related Work -- 3 Proposed Framework -- 3.1 Person Detection and Tracking -- 3.2 Human Skeleton Extraction -- 3.3 Action Recognition and Post-processing -- 4 Experimental Results -- 4.1 Datasets -- 4.2 Experimental Results and Discussions -- 5 Conclusion and Future Work -- References -- Solutions to Improve the Performance of the Algorithm with the Adaptive Decay Time for the Spiking Neural Nets -- 1 Introduction -- 2 The Backpropagation Algorithm to Adjust the Decay Time -- 2.1 Spiking Response Model -- 2.2 Update d_{ij} for the k th Synapse Between the i th Neuron in the Last Hidden Layer and the j th Neuron in the Output Layer -- 2.3 Update d_{hi} for the k th Synapse Between the i th Neuron in the Hidden Layer and the h th Neuron in the Input Layer -- 3 An Adaptation of the Learning Rate and Momentum -- 3.1 The Adaptive Learning Rate Regulation Rule -- 3.2 The Adaptive Momentum Regulation Rule. 4 Experiment and Discussion -- 4.1 The Experiment on the XOR Classification Data Set -- 4.2 The Experiment in Identifying Aerodynamic Coefficients in the Axial Motion of an Aircraft with Data Set Recorded from Flights -- 5 Conclusion -- References -- Enhancing Security for Private Cloud When Deployed at Small Department -- 1 Introduction -- 2 Theoretical Background -- 2.1 Cloud Computing -- 2.2 Security Issues for the Cloud Computing System -- 3 Deploy Private Cloud at Small Department -- 4 Apply Security Methods for Private Cloud -- 4.1 Install Https Security Protocol for CloudStack Management

Homepage -- 4.2 Set the Https Security Protocol for the System Virtual Machine Access Page -- 4.3 Create an Admin SSH Connection to CloudStack Server and KVM Virtualization Server -- 4.4 Create SFTP Connection to CloudStack Server and KVM Virtualization Server -- 4.5 Install Software to Create Secret Drives for Users' Virtual Machines -- 4.6 Decentralize User Groups on CloudStack -- 4.7 Allocate Resource Quotas to Users -- 4.8 Configure Rules in Iptable that Limit the Networks and Ports that Can Be Accessed -- 5 Conclusion and Future Works -- References -- An Integrated Toolbox of Time-Frequency Techniques for Preprocessing in AI Networks -- 1 Introduction -- 2 Signal Processing Techniques -- 2.1 Fast Fourier Transform -- 2.2 Short-Time Fourier Transform -- 2.3 Wigner-Ville Distribution -- 2.4 Continuous Wavelet Transform -- 2.5 Hilbert-Huang Transform -- 3 Signal Model -- 4 The Time-Frequency Toolbox -- 4.1 Design of Toolbox -- 4.2 Simulation Results -- 5 Conclusion -- References -- Is Transformer Good for Vision-Based Human Action Recognition with Limited Data Source -- 1 Introduction -- 2 Transformer Model for Human Action Recognition -- 2.1 General Framework -- 2.2 Recognition Model -- 2.3 LightTimeSFormer -- 3 Experiments -- 3.1 Datasets.

3.2 Experimental Results -- 4 Conclusion -- References -- A Solution Improves the Accuracy in Determining Orientation Parameters for the Carrier Device -- 1 Introduction -- 2 Theoretical Models and Methods -- 2.1 Directional Cosine Matrix and Orientation Angles -- 2.2 Application of Extended Nonlinear Kalman Filter and Algorithm to Determine Orientation Parameters for Gimbalinng Inertial Navigation System of Moving Object -- 2.3 Describe the Algorithm Model Using ANN When GPS is Lost -- 3 Simulation and Discussion -- 4 Conclusion -- References -- DLMs and VR App Development in Teaching Cell Biology in High Schools -- 1 Introduction -- 2 Related Works -- 3 Our Proposal -- 4 Experiment and Result -- 5 Conclusion -- References -- Enhancing Whisper Model for Vietnamese Specific Domain with Data Blending and LoRA Fine-Tuning -- 1 Introduction -- 2 Related Works -- 3 Back Ground -- 3.1 Whisper Model -- 3.2 Efficient Fine Tuning Method: LoRA Fine-Tuning -- 4 Proposed Method -- 4.1 Data Blending Framework -- 4.2 Whisper Model Fine-Tuning -- 4.3 Datasets -- 5 Experiments and Results -- 5.1 Evaluation Metrics and Experimental Setups -- 5.2 Results and Discussions -- 6 Conclusions -- References -- Crack Detection Based on the Wavelet Analysis of a Beam-Like Structure Under the Moving Load -- 1 Introduction -- 2 Setting Finite Element Model for Bridge-Vehicle System -- 3 Wavelet Transform -- 4 Simulation of Vehicle-Bridge Oscillation and Diagnosis of Cracks by Wavelet Method -- 5 Conclusion -- References -- Diagnosis Parkinson's Disease Using Neural Network and EEG Signals -- 1 Introduction -- 1.1 Description of the Data -- 1.2 EEG Dataset and Preprocessing -- 1.3 Feature Extraction -- 1.4 Artificial Neural Network -- 2 Results -- 3 Conclusions -- References -- Medicchain: A Multi-chain Based System for Managing Prescription Medications Using Zero Knowledge Proofs.

1 Introduction -- 2 Related Works -- 3 Proposed System -- 3.1 Entities Definition -- 3.2 Prescription Design -- 3.3 Prescription's Access Control and Logical -- 4 Experiment Results -- 5 Conclusion -- References -- Deep Continual Image Classification Based on Memory Prototype and Energy-Based Feature Synchronizing -- 1 Introduction -- 2 Related Work -- 3 Method -- 4 Experiments and Results -- 5 Conclusion -- References -- Choosing the BICM-ID System's M-QAM Mapper -- 1 Introduction -- 2 System Architecture Bit-Interleaved Coded Modulation with Iterative Decoding (BICM-ID) -- 3 Analysis

and Selection of Mappings for M-QAM Signal Sets -- 3.1 The Parameter Determines the BER Bit Error Rate Quality Factor of the BICM-ID System -- 3.2 Mapping Selection for 4-QAM Modulation -- 3.3 Mapping Selection for 8-QAM Modulation -- 3.4 Mapping Selection for 16-QAM Modulation -- 4 Simulation Results -- 5 Conclusion -- References -- Endpoint Detection and Response System: Emerging Cyber Security Technology -- 1 Introduction -- 1.1 EDR System Overview and Its Significance in Cybersecurity -- 1.2 Brief History of the EDR System -- 2 EDR Components and Capabilities -- 2.1 Description of the Critical Components of EDR Systems -- 2.2 Overview of EDR Capabilities -- 3 EDR Implementation and Integration -- 3.1 Best Practices for Implementing EDR System in an Organisation -- 3.2 EDR System Integration with Other Cybersecurity Technologies -- 4 EDR Effectiveness and ROI -- 4.1 Overview of Studies and Statistics on the EDR System -- 5 EDR Challenges and Future Trends -- 5.1 Challenges in Implementing and Using EDR System -- 5.2 Discussion of Future Trends in EDR -AI and Machine Learning -- 6 Case Studies -- 6.1 Real-World Examples of Organisations that Have Successfully Implemented EDR System -- 7 Analysis of the Impact of EDR on Their Cybersecurity Posture -- 8 Conclusion. References.

Sommario/riassunto

This book presents Proceedings of the International Conference on Intelligent Systems and Networks, Hanoi, Vietnam, a collection of peer-reviewed articles accepted by ICISN 2024. It includes current research outcomes and results of cutting-edge work reported by the authors. The articles included here are very useful for researchers and industry practitioners. The scope of the proceedings include, but not limited to Foundations of Computer Science; Computational Intelligence, Language and speech processing; Software Engineering and software development methods; Wireless Communications, Signal Processing for Communications, Next-generation mobile networks, Internet-of-Things and Sensor Systems; etc. In all, this proceedings is of great value as reference in these emerging areas of research.
