1. Record Nr.   UNINA9910797406703321

   Autore   Biron Michel

   Titolo   Material selection for thermoplastic parts : practical and advanced information for plastics engineers / / Michel Biron ; acquisition editor David Jackson ; designer Greg Harris

   Pubbl/distr/stampa   Amsterdam, [Netherlands] : , : William Andrew, , 2016
                        ©2016

   ISBN   0-7020-6287-1

   Descrizione fisica   1 online resource (0 p.)

   Collana   PDL handbook series

   Disciplina   668.423

   Soggetti   Thermoplastics

   Lingua di pubblicazione   Inglese

   Formato   Materiale a stampa

   Livello bibliografico   Monografia

   Note generali   Description based upon print version of record.

   Nota di bibliografia   Includes bibliographical references at the end of each chapters and index.

2.	Record Nr.	UNINA9910817451303321
	Autore	Fridman Ella
	Titolo	Heat transfer virtual lab for students and engineers : theory and guide for setting up / / Ella Fridman and Harshad S. Mahajan
	Pubbl/distr/stampa	New York : , : Momentum Press, , [2014] ©2014
	ISBN	1-60650-549-1
	Descrizione fisica	1 online resource (128 p.)
	Collana	Thermal science and energy engineering collection
	Disciplina	621.40220113
	Soggetti	Heat - Transmission - Computer simulation
	Lingua di pubblicazione	Inglese
	Formato	Materiale a stampa
	Livello bibliografico	Monografia
	Note generali	Description based upon print version of record.
	Nota di bibliografia	Includes bibliographical references (page [105]) and index.
	Nota di contenuto	1. Introduction -- 1.1 History of distance learning and concept of virtual lab -- 1.2 What is virtual lab? -- 1.3 Analysis of the project requirements -- 1.4 Learning theory and its influence on role design -- 1.5 System architecture -- 1.6 Model hierarchy -- 1.7 Web user interface -- 1.8 Questions -- 2. LabVIEW basics -- 2.1 LabVIEW introduction -- 2.2 G-language -- 2.3 Front panel -- 2.4 Block diagram -- 2.5 LabVIEW palettes -- 2.6 Programming with LabVIEW -- 2.7 Programming structures -- 2.8 Data acquisition with LabVIEW -- 2.9 Questions -- 3. Hardware: Armfield Heat Exchanger and Service Unit -- 3.1 Operating HT30XC using customer-generated software -- 3.2 USB interface driver function calls -- 3.3 LabVIEW data logger -- 4. Design of LabVIEW VI program -- 4.1 Software: algorithm of the program -- 4.2 Introduction of LabVIEW controls used in the project -- 4.3 Design of front panel -- 4.4 Design of block diagram -- 4.5 How were the PID parameters' values derived for temperature control? -- 4.6 Questions -- 5. Experiments -- 5.1 How to perform an experiment using the LabVIEW interface? -- 5.2 How would a student access the experiment over the internet? -- 5.3 Experiment results -- 6. Factors influencing the virtual lab -- 6.1 Drivers for programmable devices -- 6.2 Concurrent requirements for same experiment -- 6.3 User authentication -- 6.4 Issues surrounding live training -- 6.5

System management and development -- 6.6 Future developments --
7. Experiment instructions -- 7.1 Instructions for the shell and tube heat exchanger experiment -- 7.2 Instructions for the PID control for heater experiment --
8. Related work -- Bibliography -- Index.

Sommario/riassunto	Laboratory experiments are a vital part of engineering education, which historically were considered impractical for distance learning. In view of this, the proposed book presents a guide for the practical employment of a heat transfer virtual lab for students and engineers. The main objective of our virtual lab is to design and implement a real-time, robust, and scalable software system that provides easy access to lab equipment anytime and anywhere over the Internet. We have combined Internet capabilities with traditional laboratory exercises to create an efficient environment to carry out interactive, online lab experiments. Thus, the virtual lab can be used from a remote location as a part of a distance learning strategy. Our system is based on client-server architecture. The client is a general purpose java-enabled web-browser (e.g. Internet Explorer, Firefox, Chrome, Opera, etc.) which communicates with the server and the experimental setup. The client can communicate with the server and the experimental setup in two ways: either by means of a web browser, which runs a dedicated CGI (Common Gateway Interface) script in the server, or using the LabVIEW Player, which can be downloaded and installed for free. In both cases, the client will be capable of executing VIs (Virtual Instruments) specifically developed for the experiment in question, providing the user with great ability to control the remote instrument and to receive and present the desired experimental data. Examples of this system for several particular experiments are described in detail in the book.

3.	Record Nr.	UNINA9910983069503321
	Autore	Lan Xuguang
	Titolo	Intelligent Robotics and Applications : 17th International Conference, ICIRA 2024, Xi'an, China, July 31 – August 2, 2024, Proceedings, Part IX / / edited by Xuguang Lan, Xuesong Mei, Caigui Jiang, Fei Zhao, Zhiqiang Tian
	Pubbl/distr/stampa	Singapore : , : Springer Nature Singapore : , : Imprint : Springer, , 2025
	ISBN	9789819607891 9819607892
	Edizione	[1st ed. 2025.]
	Descrizione fisica	1 online resource (667 pages)
	Collana	Lecture Notes in Artificial Intelligence, , 2945-9141 ; ; 15209
	Altri autori (Persone)	MeiXuesong JiangCaigui ZhaoFei TianZhiqiang
	Disciplina	006.3
	Soggetti	Artificial intelligence Software engineering Application software User interfaces (Computer systems) Human-computer interaction Computer networks Artificial Intelligence Software Engineering Computer and Information Systems Applications User Interfaces and Human Computer Interaction Computer Communication Networks
	Lingua di pubblicazione	Inglese
	Formato	Materiale a stampa
	Livello bibliografico	Monografia
	Nota di contenuto	-- Robotics in Cooperative Manipulation, MultiSensor Fusion, and Multi-Robot Systems. .-Dense Point Cloud Upsampling Method for Coal Mine Tunnels Based on Upsampling. -- Optimal Strategies for Multiple Agents in Homicidal Chauffeur Reach-Avoid Games via Potential Game-Based Matching. -- A Novel Mission Planning Method for Multi-robot Collaborative Area Coverage. -- Layout optimization of a

heterogeneous multi-robot system for mirror milling. -- An Automatic Weighting Decision-making Framework for Trajectory Tracking of the Overactuated UAVs Platform. -- Multi-sensor Fusion Localization and Terrain Reconstruction for Guided Quadruped Robots. -- Multi-modal Cooperative Perception of Constrained Multi-UAV Platform. -- Obstacle Avoidance for Guided Quadruped Robots in Complex Environments. -- Human-machine Co-adaptive Interface. -- 3D Rock and Pothole Detection in Desert for the Wild Navigation. -- Learning Adaptive Edge Dual-Graph Convolutional Network for Robust Point Cloud Analysis. -- AttenS: an Attentive Selection Method for Communication-Efficient Cooperative Perception. -- An Analytical Inverse Kinematics Optimization Method of 7-DOF anthropomorphic manipulators with joint limits. -- Event Camera Localization in 3D LiDAR Maps. -- Enhanced YOLOv8 integrated brain-inspired attention mechanisms for weed detection. -- Brain-inspired visual language navigation robot position deviation correction. -- Psychological Conditions Analysis based on Text Detection and Facial Expression Recognition. -- Integrating Retinex theory for YOLO-based Object Detection in Low-illumination Environments. -- Remote Sensing Infrared Weak and Small Target Detection Method Based on Improved YOLOv5 and Data Augmentation. -- Vehicle detection method in foggy weather based on YOLO with human eye mechanisms. -- Planning, control and application of bionic novel concept robots. -- A Water Surface Jumping Robot Inspired by the Pygmy Mole Cricket. -- Real-time Path Planning Under Signal Temporal Logic Specifications in Dynamic Environment. -- An Enhanced DMP Approach for Robotic Manipulator Autonomous Obstacle Avoidance Using Dynamic Potential Function. .-Free-form Instruction Guided Robotic Navigation Path Planning with Large Vision-Language Model. -- A Forward Kinematics Solution Method for Cable-Driven Hyper-Redundant Manipulators Based on Self-Attention Mechanism. -- A Physics-based Simulator for Bi-directional Motor Driven Flapping Wing Micro Air Vehicles. -- Active disturbance rejection control of telescopic-wing morphing aircraft: Accommodating composite disturbances. -- Robust Perception for Safe Driving. -- A Variable Parameter LoD Model Point Cloud Compression Method Based on Attention Mechanism. -- A Dynamical Systems-Based Peg-in-Hole Assembly Method using Temporal Logic Task Planner. -- Development of a Multi-channel Wireless Wearable Muscle Oxygen Monitoring Device. -- A Robust Identification Method for Robot Drive Gains Using a Payload. -- A Neuromorphic Tactile Perception System Based on Spiking Neural Network for Texture Recognition. -- Gait Recognition Based on A-Mode Ultrasound and Inertial Sensor Fusion Systems. -- Motion Planning via Deep Reinforcement Learning and Nerf-Based Layering for Mobile Robots with Different Heights. -- Structural Design and Motion Analysis of a Wall-Pressing In-Pipe Robot Based on Mecanum Wheels. -- Brain inspired intelligence for robotics.

Sommario/riassunto	The 10-volume set LNAI 15201-15210 constitutes the proceedings of the 17th International Conference on Intelligent Robotics and Applications, ICIRA 2024, which took place in Xi'an, China, during July 31–August 2, 2024. The 321 full papers included in these proceedings were carefully reviewed and selected from 489 submissions. They were organized in topical sections as follows: Part I: Innovative Design and Performance Evaluation of Robot Mechanisms. Part II: Robot Perception and Machine Learning; Cognitive Intelligence and Security Control for Multi-domain Unmanned Vehicle Systems. Part III: Emerging Techniques for Intelligent Robots in Unstructured Environment; Soft Actuators and Sensors; and Advanced Intelligent and Flexible Sensor

Technologies for Robotics. Part IV: Optimization and Intelligent Control of Underactuated Robotic Systems; and Technology and application of modular robots. Part V: Advanced actuation and intelligent control in medical robotics: Advancements in Machine Vision for Enhancing Human-Robot Interaction; and Hybrid Decision-making and Control for Intelligent Robots. Part VI: Advances in Marine Robotics; Visual, Linguistic, Affective Agents: Hybrid-augmented Agents for Robotics; and Wearable Robots for Assistance, Augmentation and Rehabilitation of human movements. Part VII: Integrating World Models for Enhanced Robotic Autonomy; Advanced Sensing and Control Technologies for Intelligent Human-Robot Interaction; and Mini-Invasive Robotics for In-Situ Manipulation. Part VIII: Robot Skill Learning and Transfer; Human-Robot Dynamic System: Learning, Modelling and Control; AI-Driven Smart Industrial Systems; and Natural Interaction and Coordinated Collaboration of Robots in Dynamic Unstructured Environments. Part IX: Robotics in Cooperative Manipulation, MultiSensor Fusion, and Multi-Robot Systems; Human-machine Co-adaptive Interface; Brain inspired intelligence for robotics; Planning, control and application of bionic novel concept robots; and Robust Perception for Safe Driving. Part X: AI Robot Technology for Healthcare as a Service; Computational Neuroscience and Cognitive Models for Adaptive Human-Robot Interactions; Dynamics and Perception of Human-Robot Hybrid Systems; and Robotics for Rehabilitation: Innovations, Challenges, and Future Directions.