

Industrial Automation Paving The Way For Omron Apac

This congress proceedings provides recent research on leading-edge manufacturing processes. The aim of this scientific congress is to work out diverse individual solutions of "production in the border area" and transferable methodological approaches. In addition, guest speakers with different backgrounds will give the congress participants food for thoughts, interpretations, views and suggestions. The manufacturing industry is currently undergoing a profound structural change, which on the one hand produces innovative solutions through the use of high-performance communication and information technology, and on the other hand is driven by new requirements for goods, especially in the mobility and energy sector. With the social discourse on how we should live and act primarily according to guidelines of sustainability, structural change is gaining increasing dynamic. It is essential to translate politically specified sustainability goals into socially accepted and marketable technical solutions. Production research is meeting this challenge and will make important contributions and provide innovative solutions from different perspectives.

This volume is a step-by-step guide to implementing predictive data analytics in human resource management (HRM). It demonstrates how to apply and predict various HR outcomes which have an organisational impact, to aid in strategising and better decision-making. The book: Presents key concepts and expands on the need and role of HR analytics in business management. Utilises popular analytical tools like artificial neural networks (ANNs) and K-nearest neighbour (KNN) to provide practical demonstrations through R scripts for predicting turnover and applicant screening. Discusses real-world corporate examples and employee data collected first-hand by the authors. Includes individual chapter exercises and case studies for students and teachers. Comprehensive and accessible, this guide will be useful for students, teachers, and researchers of data analytics, Big Data, human resource management, statistics, and economics. It will also be of interest to readers interested in learning more about statistics or programming.

This book constitutes the refereed proceedings of the 11th International Conference on System Analysis and Modeling, SAM 2019, held in Munich, Germany, in September 2019. The 12 full papers and 2 work in progress papers presented together with one keynote talk were carefully reviewed and selected from 28 submissions. The papers discuss the most recent innovations, trends, and experiences in modeling and analysis of complex systems using ITU-T's Specification and Description Language (SDL-2010) and Message Sequence Chart (MSC) notations, as well as related system design languages — including UML, ASN.1, TTCN, SysML, and the User Requirements Notation (URN). SAM 2019's theme was "Languages, Methods, and Tools for Industry 4.0."

This book will provide readers with an understanding of the employability concept and develop an employability skills improvement model to enhance the employability of built environment graduates to foster economic development. The developed model determines the influence of generic skills, discipline specific skills, work-integrated learning, emotional intelligence, university-industry collaboration outcomes and 4IR knowledge in predicting the outcomes of improved graduate employability. The model is developed with a theoretical lens on existing frameworks of employability and skills development. Whilst drawing comparisons with countries such as the UK, USA, Australia and Canada, the authors present the results of a two-stage Delphi survey in South Africa as a case study on the current state of skills development and on the skills of the future. The case study is presented in line with the South Africa's long-term National Development Plan (NDP) aimed at developing the key capabilities and skills of its citizens by ensuring quality education on a broader scale by 2030. As automation continues to rapidly advance, the pressures on universities to revamp and restructure their curricula have become increasingly necessary. This book recommends that higher education institutions urgently need to intensify their efforts by introducing significant modifications to the science and technology curriculum to enable students to develop and acquire competencies in the rapidly emerging areas of artificial intelligence, data science, robotics, advanced simulation, data communication, system automation, real-time inventory operations, cloud computing, and information technologies. This implies that universities' curriculum should be infused with 4IR thinking within the conventional primary sciences of biology, chemistry, and physics, with greater emphasis on digital literacy to boost 4IR understanding amongst the graduates. The book is therefore of interest to researchers and policy makers in the built environment that are placed in academia, the construction industry or at consultancy levels, it provides significant recommendations for universities as they intensify their efforts to develop graduates for the future.

This book describes different mathematical modeling and soft computing techniques used to solve practical engineering problems. It gives an overview of the current state of soft computing techniques and describes the advantages and disadvantages of soft computing compared to traditional hard computing techniques. Through examples and case studies the editors demonstrate and describe how problems with inherent uncertainty can be addressed and eventually solved through the aid of numerical models and methods. The chapters address several applications and examples in bioengineering science, drug delivery, solving inventory issues, Industry 4.0, augmented reality and weather forecasting. Other examples include solving fuzzy-shortest-path problems by introducing a new distance and ranking functions. Because, in practice, problems arise with uncertain data and most of them cannot be solved exactly and easily, the main objective is to develop models that deliver solutions with the aid of numerical methods. This is the reason behind investigating soft numerical computing in dynamic systems. Having this in mind, the authors and editors have considered error of approximation and have discussed several common types of errors and their propagations. Moreover, they have explained the numerical methods, along with convergence and consistence properties and characteristics, as the main objectives behind this book involve considering, discussing and proving related theorems within the setting of soft computing. This book examines dynamic models, and how time is fundamental to the structure of the model and data as well as the understanding of how a process unfolds • Discusses mathematical modeling with soft computing and the implementations of uncertain mathematical models • Examines how uncertain dynamic systems models include

uncertain state, uncertain state space and uncertain state's transition functions • Assists readers to become familiar with many soft numerical methods to simulate the solution function's behavior This book is intended for system specialists who are interested in dynamic systems that operate at different time scales. The book can be used by engineering students, researchers and professionals in control and finite element fields as well as all engineering, applied mathematics, economics and computer science interested in dynamic and uncertain systems. Ali Ahmadian is a Senior Lecturer at the Institute of IR 4.0, The National University of Malaysia. Soheil Salahshour is an associate professor at Bahcesehir University.

This book gives a comprehensive account on the manufacturing techniques to synchronize the desired properties of both traditional and advanced ceramics. Offers exclusive and up to date information on industrial ceramic processing equipment and approaches and discusses actual industrial practices taking a product-oriented approach It should serve as a text to answer the processing of ceramics and achieve targeted product in industrial environment.

This book is the fourth volume of the sub series of the Lecture Notes in Mobility dedicated to Road Vehicle Automation. Its chapters have been written by researchers, engineers and analysts from all around the globe. Topics covered include public sector activities, human factors and challenges, ethical, legal, energy and technology perspectives, vehicle systems development, as well as transportation infrastructure and planning. The book is based on the Automated Vehicles Symposium which took place in San Francisco, California (USA) in July 2016.

In the concluding chapters of this book the author introduces GIM, the Global Intelligent Machine. GIM is a huge global hybrid machine, a combination of production machinery, information machinery and mechanized networks. In the future it may very well encompass all machinery on the globe. The author discusses the development of machines from the Stone Age until the present and pays particular attention to the rise of the science of machines and the development of the relationship between science and technology. The first production and information tools were invented in the Stone Age. In the Agricultural empires tools and machinery became more complex. During and after the Industrial Revolution the pace of innovation accelerated. In the 20th century the mechanization of production, information processing and networks became increasingly sophisticated. GIM is the culmination of this development. GIM is no science fiction. GIM exists and is growing and getting smarter and smarter. Individuals and institutions are trying to control parts of this giant global robot. By looking at its history and by putting GIM in the context of the current developments, this book seeks to reach a fuller understanding of this phenomenon. LIFE Magazine is the treasured photographic magazine that chronicled the 20th Century. It now lives on at LIFE.com, the largest, most amazing collection of professional photography on the internet. Users can browse, search and view photos of today's people and events. They have free access to share, print and post images for personal use.

The book provides a holistic and practical approach to lean management throughout the business value chain. The lean management framework and tools demonstrate the optimal design and use of methods, tools and principles for companies and organisations. The author describes comprehensively how lean management enables companies to concentrate on value-adding activities and processes to achieve a long-term, sustainable competitive advantage. A wealth of best practices, industry examples and case studies are used to reveal the diversity and opportunities of lean management methodologies, methods and principles. Moreover, the book shows how lean management principles are ultimately applied in industries like automotive, healthcare, education and services industries.

This work presents the fundamental principles of continuous flow manufacturing, furnishing a corporate strategy and set of operating rules that help create an environment where continuous flow manufacturing can flourish. A 10-step methodology for converting a traditional factory to a continuous flow operation is provided, and conventional manufacturing techniques are compared with the continuous flow approach. This book sets out to explain blockchain for the non-technical expert, to decipher the dense technicalities that dominate the field and to present the opportunities for busy professionals using practical applications and case studies. Presented in a clear and structured way and with documented real-world cases, the book is a practical reference guide that can be used across different industries. It offers both a constructive and critical review of the pain points blockchain is facing today, illustrates the pitfalls as well as the opportunities for business and describes the steps towards overcoming them. It also aims to provide a unique view of both the intersection and synergy of blockchain with other emerging technologies and the wider digital ecosystem, as we see increasingly that blockchain alone won't be able to deliver business solutions. Most important, the book identifies trends and a path for the future of blockchain and its impact on society as a whole. The book is written for business audiences across all sectors. It is not a technical guide to blockchain, but it enables businesspeople to be better informed and prepared to plan ahead and develop strategies using blockchain.

This book provides an overview of training and teaching methods, as well as education strategies, for Additive Manufacturing (AM) and its application in different business sectors. It presents real-world applications and case studies to demonstrate the key practical and theoretical fundamentals of AM training, written by international experts from the field. Additive Manufacturing is a rapidly developing technology, and having a well-trained workforce is essential. Accordingly, readers are introduced to new training approaches and recent breakthroughs that can facilitate and accelerate the design, application and implementation of AM. The book's contributors discuss many topics to provide readers a fundamental grasp of AM, including: • collaboration among educational bodies, and between industry and governments; • strategies for implementing AM training; • new teaching methods; • training programs that provide alternative employment choices; • the need for certification by professional bodies; and • promoting awareness of AM in society. This book offers an excellent source of information for researchers and industrial engineers who are interested in expanding their AM expertise, and learning how to implement it. It will also be of interest to readers who want to learn about the practicalities of adopting training and teaching for AM.

This book features state-of-the-art contributions from two well-established conferences: Changeable, Agile, Reconfigurable and Virtual Production Conference (CARV2020) and Mass Customization and Personalization Conference (MCPC2020). Together, they focus on the joint design, development, and management of products, production systems, and business for sustainable customization and personalization. The book covers a large range of topics within this domain, ranging from industrial success factors to original contributions within the field.

Industrial electronics systems govern so many different functions that vary in complexity-from the operation of relatively simple applications, such as electric motors, to that of more complicated machines and systems, including robots and entire fabrication processes. The Industrial Electronics Handbook, Second Edition combines traditional and new

This book covers essential topics in the architecture and design of Internet of Things (IoT) systems. The authors provide state-of-the-art information that enables readers to design systems that balance functionality, bandwidth, and power consumption, while providing secure and safe operation in the face of a wide range of threat and fault models. Coverage includes essential topics in system modeling, edge/cloud architectures, and security and safety, including cyberphysical systems and industrial control systems.

Introduction to Process Control, Third Edition continues to provide a bridge between traditional and modern views of process

control by blending conventional topics with a broader perspective of integrated process operation, control, and information systems. Updated and expanded throughout, this third edition addresses issues highly relevant to today's teaching of process control: Discusses smart manufacturing, new data preprocessing techniques, and machine learning and artificial intelligence concepts that are part of current smart manufacturing decisions Includes extensive references to guide the reader to the resources needed to solve modeling, classification, and monitoring problems Introduces the link between process optimization and process control (optimizing control), including the effect of disturbances on the optimal plant operation, the concepts of steady-state and dynamic back-off as ways to quantify the economic benefits of control, and how to determine an optimal transition policy during a planned production change Incorporates an introduction to the modern architectures of industrial computer control systems with real case studies and applications to pilot-scale operations Analyzes the expanded role of process control in modern manufacturing, including model-centric technologies and integrated control systems Integrates data processing/reconciliation and intelligent monitoring in the overall control system architecture Drawing on the authors' combined 60 years of teaching experiences, this classroom-tested text is designed for chemical engineering students but is also suitable for industrial practitioners who need to understand key concepts of process control and how to implement them. The text offers a comprehensive pedagogical approach to reinforce learning and presents a concept first followed by an example, allowing students to grasp theoretical concepts in a practical manner and uses the same problem in each chapter, culminating in a complete control design strategy. A vast number of exercises throughout ensure readers are supported in their learning and comprehension. Downloadable MATLAB® toolboxes for process control education as well as the main simulation examples from the book offer a user-friendly software environment for interactively studying the examples in the text. These can be downloaded from the publisher's website. Solutions manual is available for qualifying professors from the publisher.

This is the proceedings of the 6th International Symposium on History of Machines and Mechanisms that was held in Beijing, China, in September 2018. The Symposium provided an international forum for presenting and discussing historical developments in the field of Machine and Mechanism Science (MMS). Special sections focused on the following topics: . modern reviews of past works . engineers in history, and their works . direct memories of the recent past . the development of theories . the history of the design of machines and mechanisms . development of automation and robots . the development of teaching of MMS . the schools and institutes of mechanical engineering . the heritage of machines and mechanisms

Business innovation and industrial intelligence are paving the way for a future in which smart factories, intelligent machines, networked processes and Big Data are combined to foster industrial growth. The maturity and growth of instrumentation, monitoring and automation as key technology drivers support Industry 4.0 as a viable, competent and actionable business model. This book offers a primer, helping readers understand this paradigm shift from industry 1.0 to industry 4.0. The focus is on grasping the necessary pre-conditions, development & technological aspects that conceptually describe this transformation, along with the practices, models and real-time experience needed to achieve sustainable smart manufacturing technologies. The primary goal is to address significant questions of what, how and why in this context, such as: What is Industry 4.0? What is the current status of its implementation? What are the pillars of Industry 4.0? How can Industry 4.0 be effectively implemented? How are firms exploiting the Internet of Things (IoT), Big Data and other emerging technologies to improve their production and services? How can the implementation of Industry 4.0 be accelerated? How is Industry 4.0 changing the workplace landscape? Why is this melding of the virtual and physical world needed for smart production engineering environments? Why is smart production a game-changing new form of product design and manufacturing?

The Industrial Electronics Handbook, Second Edition, Industrial Communications Systems combines traditional and newer, more specialized knowledge that helps industrial electronics engineers develop practical solutions for the design and implementation of high-power applications. Embracing the broad technological scope of the field, this collection explores fundamental areas, including analog and digital circuits, electronics, electromagnetic machines, signal processing, and industrial control and communications systems. It also facilitates the use of intelligent systems—such as neural networks, fuzzy systems, and evolutionary methods—in terms of a hierarchical structure that makes factory control and supervision more efficient by addressing the needs of all production components. Enhancing its value, this fully updated collection presents research and global trends as published in the IEEE Transactions on Industrial Electronics Journal, one of the largest and most respected publications in the field. Modern communication systems in factories use many different—and increasingly sophisticated—systems to send and receive information. Industrial Communication Systems spans the full gamut of concepts that engineers require to maintain a well-designed, reliable communications system that can ensure successful operation of any production process. Delving into the subject, this volume covers: Technical principles Application-specific areas Technologies Internet programming Outlook, including trends and expected challenges Other volumes in the set: Fundamentals of Industrial Electronics Power Electronics and Motor Drives Control and Mechatronics Intelligent Systems

This unique book comprehensively presents the current state of knowledge, theoretical and practical alike, in the field of business-to-business (B2B) marketing. More than 30 of the best and most recognized B2B marketers address the most relevant theoretical foundations, concepts, tried and tested approaches and models from entrepreneurial practice. Many of those concepts are published for the first time ever in this book. The book not only builds on the existing classic literature for industrial goods marketing but also – and much more importantly – finally closes the gap towards the rapidly growing ecosystem of modern B2B marketing terms, instruments, products, and topics. Technical terms such as Account-Based Marketing, Buyer Journey, ChatBots, Content AI, Marketing Automation, Marketing Canvas, Social Selling, Touchpoint Sensitivity Analysis, and Predictive Intelligence are explained and examined in detail, especially in terms of their applicability and implementation. The book as a whole reflects the B2B marketing journey so that the readers can directly connect the content to their own experience and use the book as a guide in their day-to-day work for years to come.

This book presents the analysis of problems and strategies related to the interface between basic and applied research in physics and industrial development, in the context of developing countries, with emphasis on the Latin American experience. It also reports on innovative products and processes related to basic and applied research in physics.

Contents: Technological Change and Economic Development Bridging the Gap Research in Industry University-Industry Cooperation I Materials Characterization and Applied Physics Development of New Materials and Devices Development of New Techniques and Processes University-Industry Cooperation II Readership: General. keywords:

Report of the panel; The challenge; Suitable emerging technologies; Pioneering experience; Some areas for further pioneer projects; Human resource, networks, institutions; Advance technology alert system.

The 30th edition of the World Investment Report looks at the prospects for foreign direct investment and international production during and beyond the global crisis triggered by the COVID-19 (coronavirus) pandemic. The Report not only projects the immediate impact of the crisis on investment flows, but also assesses how it could affect a long-term structural transformation of international production. The theme chapter of the Report reviews the evolution of international production networks over the past three decades and examines the configuration of these networks today. It then projects likely course changes for the next decade due to the combined effects of the pandemic and pre-existing megatrends, including the new industrial revolution, the sustainability imperative and the retreat of laissez faire policies. The system of international production underpins the economic growth and development prospects of most countries around the world. Governments worldwide will need to adapt their investment and development strategies to a changing international production landscape. At the request of the UN General Assembly, the Report has added a dedicated section on investment in the Sustainable Development Goals, to review global progress and propose possible courses of action.

Overview of Industrial Process Automation, Second Edition, introduces the basics of philosophy, technology, terminology, and practices of modern automation systems through the presentation of updated examples, illustrations, case studies, and images. This updated edition adds new developments in the automation domain, and its reorganization of chapters and appendixes provides better continuity and seamless knowledge transfer. Manufacturing and chemical engineers involved in factory and process automation, and students studying industrial automation will find this book to be a great, comprehensive resource for further explanation and study. Presents a ready made reference that introduces all aspects of automation technology in a single place with day-to-day examples Provides a basic platform for the understanding of industry literature on automation products, systems, and solutions Contains a guided tour of the subject without the requirement of any previous knowledge on automation Includes new topics, such as factory and process automation, IT/OT Integration, ISA 95, Industry 4.0, IoT, etc., along with safety systems in process plants and machines

The book begins with an overview of automation history and followed by chapters on PLC, DCS, and SCADA –describing how such technologies have become synonymous in process instrumentation and control. The book then introduces the niche of Fieldbuses in process industries. It then goes on to discuss wireless communication in the automation sector and its applications in the industrial arena. The book also discusses the all-pervading IoT and its industrial cousin, IIoT, which is finding increasing applications in process automation and control domain. The last chapter introduces OPC technology which has strongly emerged as a defacto standard for interoperable data exchange between multi-vendor software applications and bridges the divide between heterogeneous automation worlds in a very effective way. Key features: Presents an overall industrial automation scenario as it evolved over the years Discusses the already established PLC, DCS, and SCADA in a thorough and lucid manner and their recent advancements Provides an insight into today's industrial automation field Reviews Fieldbus communication and WSNs in the context of industrial communication Explores IIoT in process automation and control fields Introduces OPC which has already carved out a niche among industrial communication technologies with its seamless connectivity in a heterogeneous automation world

Dr. Chanchal Dey is Associate Professor in the Department of Applied Physics, Instrumentation Engineering Section, University of Calcutta. He is a reviewer of IEEE, Elsevier, Springer, Acta Press, Sage, and Taylor & Francis Publishers. He has more than 80 papers in international journals and conference publications. His research interests include intelligent process control using conventional, fuzzy, and neuro-fuzzy techniques. Dr. Sunit Kumar Sen is an ex-professor, Department of Applied Physics, Instrumentation Engineering Section, University of Calcutta. He was a coordinator of two projects sponsored by AICTE and UGC, Government of India. He has published around 70 papers in international and national journals and conferences and has published three books – the last one was published by CRC Press in 2014. He is a reviewer of Measurement, Elsevier. His field of interest is new designs of ADCs and DACs.

This book is an essential guide to understanding how managers in China and Southeast Asia make effective economic decisions. In today's competitive global economy, it's vital to grasp how the most dynamic part of Asia is employing accounting tools in actual practice. The carefully crafted empirical studies presented here demonstrate the application of management accounting concepts in a variety of economic scenarios. Overall, these comparative investigations describe theory and common practices in a way that yields insights for both strategic and day-to-day problem solving. Accordingly, Management Accounting in China and Southeast Asia will interest graduate students, professional practitioners, and researchers in accounting, management, and finance.

Describes facets of CAD/CAM. Illustrates how each is tied together in an integrated system. Serves as a text for college-level courses in mechanical or manufacturing engineering; for professional in-house training programs & seminars.

Testbeds are pivotal in developing and deploying 5G infrastructure in the Nordic and Baltic region. This publication investigates the challenges, potentials and opportunities in a differentiated 5G regional landscape based on a SWOT analysis and mapping of the most advanced test facilities of the region. It aims to take the temperature of 5G activities, identifying valuable verticals such as the manufacturing industry, and indicating progress in a regional, national and cross-sectorial perspective. It provides insight into the region's weaknesses and strongholds, as well as how important cross-border collaboration is in the fastforwarding 5G global race.

This contributed volume provides the state-of-the-art development on security and privacy for cyber-physical systems (CPS) and industrial Internet of Things (IIoT). More specifically, this book discusses the security challenges in CPS and IIoT systems as well as how Artificial Intelligence (AI) and Machine Learning (ML) can be used to address these challenges. Furthermore, this book proposes various defence strategies, including intelligent cyber-attack and anomaly detection algorithms for different IIoT applications. Each chapter corresponds to an important snapshot including an overview of the opportunities and challenges of realizing the AI in IIoT environments, issues related to data security, privacy and application of blockchain technology in the IIoT environment. This book also examines more advanced and specific

topics in AI-based solutions developed for efficient anomaly detection in IIoT environments. Different AI/ML techniques including deep representation learning, Snapshot Ensemble Deep Neural Network (SEDNN), federated learning and multi-stage learning are discussed and analysed as well. Researchers and professionals working in computer security with an emphasis on the scientific foundations and engineering techniques for securing IIoT systems and their underlying computing and communicating systems will find this book useful as a reference. The content of this book will be particularly useful for advanced-level students studying computer science, computer technology, cyber security, and information systems. It also applies to advanced-level students studying electrical engineering and system engineering, who would benefit from the case studies.

Cyber-Physical Systems: Foundations, Principles and Applications explores the core system science perspective needed to design and build complex cyber-physical systems. Using Systems Science's underlying theories, such as probability theory, decision theory, game theory, organizational sociology, behavioral economics, and cognitive psychology, the book addresses foundational issues central across CPS applications, including System Design -- How to design CPS to be safe, secure, and resilient in rapidly evolving environments, System Verification -- How to develop effective metrics and methods to verify and certify large and complex CPS, Real-time Control and Adaptation -- How to achieve real-time dynamic control and behavior adaptation in a diverse environments, such as clouds and in network-challenged spaces, Manufacturing -- How to harness communication, computation, and control for developing new products, reducing product concepts to realizable designs, and producing integrated software-hardware systems at a pace far exceeding today's timeline. The book is part of the Intelligent Data-Centric Systems: Sensor-Collected Intelligence series edited by Fatos Xhafa, Technical University of Catalonia. Indexing: The books of this series are submitted to EI-Compendex and SCOPUS Includes in-depth coverage of the latest models and theories that unify perspectives, expressing the interacting dynamics of the computational and physical components of a system in a dynamic environment Focuses on new design, analysis, and verification tools that embody the scientific principles of CPS and incorporate measurement, dynamics, and control Covers applications in numerous sectors, including agriculture, energy, transportation, building design and automation, healthcare, and manufacturing

A major pandemic of the century has struck the world again. On top of that, smart technology is rapidly invading our lives, dramatically changed the way we live, work, play, and communicate. While life is becoming faster and more convenient, humans' wellbeing and mental health are deteriorating. Some are losing jobs to COVID-19 and technological advancement. Others are facing difficulty keeping pace with the sudden changes. Most importantly, we seem lost. Is our livelihood being threatened? Are our days numbered? How do we survive the post-pandemic era and smarter, faster machines? The good news is, by reprogramming our physical and psychological DNA, WE will thrive! This book is about how we can: Redefine Humans and Being Humans in the New World Order Grasp Nature's Laws and Universal Principles to Grow from Good to Great Apply Proven Systems to Increase Agility, Resilience, and Entrepreneurial Spirit Gain Insights from our Forefathers to Rethink the Meaning of Life Tap into the Human Spirit within us and Go Forth Courageously

This book discusses challenges and solutions for the required information processing and management within the context of multi-disciplinary engineering of production systems. The authors consider methods, architectures, and technologies applicable in use cases according to the viewpoints of product engineering and production system engineering, and regarding the triangle of (1) product to be produced by a (2) production process executed on (3) a production system resource. With this book industrial production systems engineering researchers will get a better understanding of the challenges and requirements of multi-disciplinary engineering that will guide them in future research and development activities. Engineers and managers from engineering domains will be able to get a better understanding of the benefits and limitations of applicable methods, architectures, and technologies for selected use cases. IT researchers will be enabled to identify research issues related to the development of new methods, architectures, and technologies for multi-disciplinary engineering, pushing forward the current state of the art.

[Copyright: 9ab04f50b5c31cf320882504a18b9304](https://www.industryautomation.com/9ab04f50b5c31cf320882504a18b9304)