



KERALA UNIVERSITY OF DIGITAL SCIENCES, INNOVATION AND TECHNOLOGY



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DIGITAL UNIVERSITY KERALA NEWSLETTER

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76th Independence Day Celebration

The DUK community came together on the campus on Monday to celebrate the 76th Independence Day. Prof. Saji Gopinath, Vice Chancellor, at dukerala hoisted the Tricolor.



"Expert Talk on Agile Software Project Management: Patterns to Avoid in Agile Ceremonies with Dr Sriram Rajagopalan."

Digital University Kerala conducted an expert talk on "Agile Software Project Management- Patterns to avoid in Agile ceremonies" by Dr Sriram Rajagopalan, Enterprise Agile Evangelist at Inflectra Corporation, Massachusetts, USA, on August 16th, 2022, at 02:30 PM.

Special Award from Chief Minister Pinarayi Vijayan for Innovations in Public Policy

Prof. Saji Gopinath, Vice Chancellor, Digital University Kerala, accompanied by S Asharaf, Dean (R & D) and Adarsh S, Research Scientist & Convener, Kerala Blockchain Academy receiving the Special Award from Chief Minister Pinarayi Vijayan for Innovations in Public Policy. DUK won the special award for Timeliness of the Response and the Spirit of Innovation for the project ImmunoChain, a big data and blockchain technologies powered vaccine traceability solution developed by KBA.



Digital University Kerala has inked a pact with Kerala Electrical & Allied Engineering Company Ltd. (kEL)

Digital University Kerala has inked a pact with Kerala Electrical & Allied Engineering Company Ltd. (kEL), for collaboration in research and electronics product development. A Memorandum of Understanding was signed between Prof. Saji Gopinath, Vice Chancellor, DUK and Col. Shaji M Varghese (Retd), Managing Director, KEL. Prof. Alex P James, Dean (Academic), DUK, Jose Joseph, Assistant Professor, DUK and Sajeev Dev, General Manager, KEL also attended the ceremony.



Faculty Publications



- Bonam, S., Joseph, J., Bhagavathi, A., Singh, S. G., & Vanjari, S. R. K. (2022, May). Silk Piezoelectric Tactile Sensors: The Way Forward to Developing Intelligent Implantable Sensors. In 2022 IEEE International Symposium on Circuits and Systems (ISCAS) (pp. 2225-2228). IEEE. DOI: 10.1109/ISCAS48785.2022.9937999
- Mogra, M., Aouti, R., Rakesh, N. S., Ahmed, A., Ashwin, R., Joseph, J., & Ananthasuresh, G. K. (2022). Analysis of a Soil-Moisture Sensor for Potential Failure Modes and Mass Manufacturing. In Machines, Mechanism and Robotics: Proceedings of iNaCoMM 2019 (pp. 1157-1167). Springer Singapore. 10.1007/978-981-16-0550-5_110
- Datta, S., Deka, B., Dandapat, S., Kumar, S., & Majumder, A. (2022, November). Enhancement of Diagnostic Information in T1-weighted Contrast Enhanced MRI using Deep Back-Projection based Super-Resolution. In 2022 IEEE 19th India Council International Conference (INDICON) (pp. 1-6). IEEE. DOI: 10.1109/INDICON56171.2022.10039876
- Deka, B., Kumar, S., & Datta, S. (2022). Dictionary Learning-Based Multichannel ECG Reconstruction Using Compressive Sensing. IEEE Sensors Journal, 22(16), 16359-16369. DOI: 10.1109/JSEN.2022.3190207
- V. Ibrahim, S. Datta, A. P. James and J. S. Paul, "Interleaved Hybrid Domain Learning for Super-Resolution MRI," 2022 IEEE International Symposium on Circuits and Systems (ISCAS), Austin, TX, USA, 2022, pp. 3433-3437, doi: 10.1109/ISCAS48785.2022.9937992.
- Kapfo, A., Datta, S., Dandapat, S., & Bora, P. K. (2022, March). LSTM based Synthesis of 12-lead ECG Signal from a Reduced Lead Set. In 2022 IEEE International Conference on Signal Processing, Informatics, Communication and Energy Systems (SPICES) (Vol. 1, pp. 296-301). IEEE. DOI: 10.1109/SPICES52834.2022.9774204

New Additions to the Collection

Brand Management: An introduction through storytelling

Branding is an increasingly important part of business strategy for all types of businesses, including start-ups, SMEs, NGOs, and large corporations. This textbook provides an introduction to brand management that can be applied to all these types of organizations. Using storytelling to guide the reader through the main concepts, theories and emerging issues, it offers a theoretical and

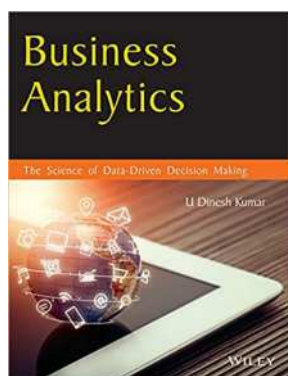


applied perspective to brand management. Highlighting the relationship between different brand concepts, this textbook explores the role of branding from both a corporate and a consumer perspective and highlights implications for employability and future career options. With case studies, activities, learning objectives and online resources for lecturers.

Source :Amazon

Mogaji, Emmanuel(2021) *Brand Management: An introduction through storytelling*. Switzerland, Palgrave Macmillan

Business analytics: The science of data-driven decision making



The book has 17 chapters and address all components of analytics such as descriptive, predictive and prescriptive analytics. The first few chapters are dedicated to foundations of business analytics. Introduction to business analytics and its components such as descriptive, predictive and prescriptive analytics along with several applications are discussed in Chapters. Business Analytics has become one

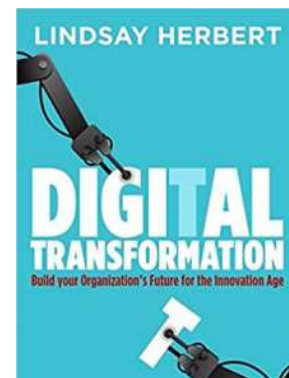
of the most important skills that every student of Management and Engineering should acquire to become successful in their career. The use of analytics across industries for decision making, problem solving, and driving organizational innovation makes it an essential skill to develop. Analytics is used as a competitive strategy by many successful companies.

Source :Amazon

Kumar, U Dinesh(2017) *Business analytics: The science of data-driven decision making* . New Delhi, John wiley & Sons.

Digital transformation: Build your organization's future for the innovation age

The secrets of real and meaningful digital transformation are often hard-won and tightly-protected by the organizations that have achieved it. Often, this means critical lessons go unshared, while costly mistakes are repeated. Digital Transformation puts a stop to this vicious cycle by unlocking the 'how' of transformation through first-hand experiences in leading major innovation programmes, supplemented by in-

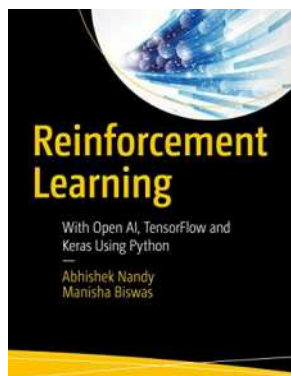


depth interviews with key industry players around the world. Distilling major transformation into five actionable stages, each chapter is heavily evidenced with insider insights from those responsible for digital transformations at organizations as diverse as the UNHCR, Lane Crawford, the American Cancer Society, Morgan Stanley and the Direct Line Group. Other companies interviewed include the Boots Walgreen Alliance, the Rijksmuseum in Amsterdam and the World Wildlife Fund.

Source :Amazon

Herbert, Lindsay(2017) *Digital transformation: Build your organization's future for the innovation age*. S London, Bloomsbury Publishing Plc

Reinforcement learning: With open AI



Master reinforcement learning, a popular area of machine learning, starting with the basics: discover how agents and the environment evolve and then gain a clear picture of how they are inter-related. You'll then work with theories related to reinforcement learning and see the concepts that build up the reinforcement learning process. Reinforcement Learning discusses algorithm implementations important for

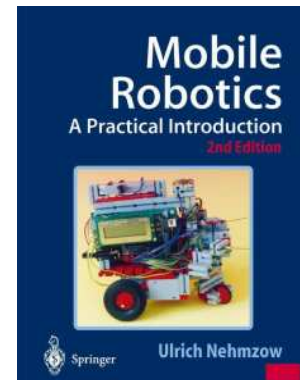
reinforcement learning, including Markov's Decision process and Semi Markov Decision process. The next section shows you how to get started with Open AI before looking at Open AI Gym. You'll then learn about Swarm Intelligence with Python in terms of reinforcement learning. The last part of the book starts with the TensorFlow environment and gives an outline of how reinforcement learning can be applied to Tensor Flow. Finally, you'll delve into Google's Deep Mind and see scenarios where reinforcement learning can be used.

Source :Publisher

Nandy, Abhishek(2018) *Reinforcement learning: With open AI*. New York, Apress.

Mobile robotics: A practical introduction

Mobile Robotics: A Practical Introduction (2nd edition) is an excellent introduction to the foundations and methods used for designing completely autonomous mobile robots. A fascinating, cutting-edge, research topic, autonomous mobile robotics is now taught in more and more universities. In this book you are introduced to the fundamental concepts of this complex field via twelve detailed case studies that show how to build and program real working robots. Topics covered include learning, autonomous navigation in unmodified, noisy and unpredictable environments, and high fidelity robot simulation. This new edition has been updated to include a new chapter on novelty detection, and provides a very practical introduction to mobile robotics for a general scientific audience. It is essential reading for 2nd and 3rd year undergraduate students and postgraduate students studying robotics, artificial intelligence, cognitive science and robot engineering.



Source :Amazon

Nehmzow, Ulrich(2023) *Mobile robotics: A practical introduction* . New York, Springer.

Biotechnology



Biotechnology, Second Edition approaches modern biotechnology from a molecular basis, which has grown out of increasing biochemical understanding of genetics and physiology. Using straightforward, less-technical jargon, Clark and Pazdernik introduce each chapter with basic concepts that develop into more specific and detailed applications. This up-to-date text covers a wide realm of topics including forensics, bioethics, and nanobiotechnology using colorful illustrations and concise applications. In addition, the book integrates recent, relevant primary research articles for each chapter, which are presented on an accompanying website. The articles demonstrate key concepts or applications of the concepts presented in the chapter, which allows the reader to see how the foundational knowledge in this textbook bridges into primary research.

Source :Amazon

David P. Clark(2017) *Biotechnology* . London, Academic Cell

FIND MORE NEW TITLES..

Check the OPAC of Knowledge Centre for new additions and their availability at <http://libcat.duk.ac.in:8081/>

- **Entrepreneurship simplified: From idea to IPO by Ashok Soota**
- **Essentials of management: An international, innovation and leadership perspective by Harold Koontz**
- **Financial management: Theory and practice by Chandra prasanna**
- **Financial services by M Y Khan**
- **Foundations of social cognition: A festschrift in honor of Robert S. Wyerm Jr. edited by Calen V. Bodenhausen**
- **Product design and development by Karl T. Ulrich**
- **Projects: Planning, analysis, selection, financing, implementation and review by Prasanna Chandra**
- **Reconstructing the corporation: From shareholder primacy to shared governance by Grant M. Hayden**