

DIGITAL UNIVERSITY KERALA

Kerala University of Digital Sciences, Innovation and Technology

NEWSLETTER

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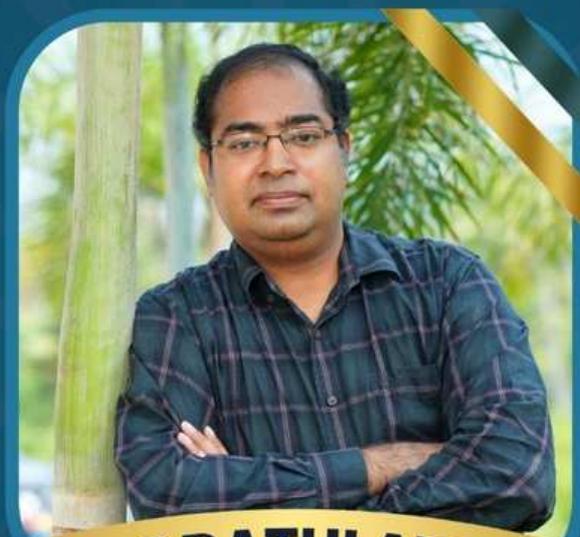
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ACHIEVEMENTS

Dr. Alex P. James, the University Dean (Academics), has been ranked among the top 1% of scientists in the world in a survey jointly conducted by Stanford University researchers and the Netherlands-based publishing company Elsevier BV. Dr. James is ranked 199 among 1,11,935 scientists in the world and fifth in India in the field of Electrical and Electronics Engineering. This is the third time the professor has found a place in this list.

Dr. Alex P. James ranked among top 1% scientists



CONGRATULATIONS

In the joint survey conducted by Stanford University and Elsevier BV, **Dr. Alex P. James**, Dean (Academics), ranked 1% of scientists among 1,11,935 scientists in the world.

DUK LATEST NEWS

Launching of WebGIS Modules Developed by DUK for Rubber Board

Dr. Tessy Thomas, Former Director General, Aeronautical Systems, DRDO, Launched the WebGIS portal on Flood vulnerability of rubber plantations for Kerala and Landslide Susceptibility of rubber plantations for Meghalaya, designed and developed by Centre for Geospatial Analytics, DUK. The launch was held in connection with the Foundation Day Celebration of RRII, 2023 on 16 October 2023 at Silver Jubilee Hall, RRII. These two information systems facilitate planters adopt necessary interventions to safeguard the plantation from disasters.

Sri. M. Vasanthagesan, IRS, Executive Director, Rubber Board and Dr. Jessy M.D, Director (RRII), Prof. Radhakrishnan, Ms. Anju, Mr. Lal Prakash and Mr. Sarath Zacharia were present during the function.



AI-FOR All Third Batch Inaugurated By Vice Chancellor

The third batch of Capacity Building in AI and Data Analytics through Systemic Skilling aiming 'AI-FOR All' started on 11th October 2023 with 14 high level officials from the Directorate of Economics & Statistics(DES) and Agriculture and Animal Husbandry Departments. The event was inaugurated by Dr.Saji Gopinath, Honorable Vice Chancellor of Digital University Kerala. Participants were addressed by Dr. Mujeeb A, Registrar DUK, Sri. Sreekumar B, Director, Economics and Statistics department and Dr.Elizabeth Sherly, Distinguished Professor and Co-Ordinator of the program.

Mr. Surag M. Digital University Kerala delivered the vote of thanks. Dr. Saji Gopinath emphasized the need of empowering Government employees through digital skills and the nature of workforce to change dynamically for better services, so that Government will become IT workplaces that recognize the power of digital technologies. Dr. Mujeeb appreciated the initiatives of Digital University as always forefront in providing specialized technical skills ahead of time. Dr. Elizabeth Sherly stated that upskilling Government employees for in-demand digital and technical skills will continue in a seasoned manner. Mr. Sreekumar, Director, DES promised all support to thrive their employees to get trained in skills, in particular AI and predictive models, which is of high demand for their organization. This 45 days program funded by Kerala IT Mission, Dept. of Electronics and IT, Government of Kerala aims to skill the workforces and to develop future talents in accordance with the changing need of government services and its delivery. Digital university is always committed to uplift the knowledge spectrum of government, industry and general public by providing various short and long duration training. The first and second batches have successfully completed for Kerala Police Dept. and Directorate of Economics and Statistics.





Inauguration of Hack-X: Tech Society at DUK - A Grand Success!

Digital University Kerala (DUK), Thiruvananthapuram: On October 19, 2023, students at Digital University Kerala celebrated a momentous occasion as the Hack-X Tech Society was officially inaugurated, marking the start of an exciting journey into the world of technology and innovation. Additionally, several events were planned in celebration of Cybersecurity Awareness Month.

The inauguration event showcased the collaborative spirit and shared passion for technology within the DUK community. Dr. A. Mujeeb, the Honorable Registrar of Digital University Kerala, officiated the inauguration of the Hack-X Tech Society.

Prof. Md. Meraj Uddin, Assistant Professor and Chair of Students' Affairs at DUK, delivered the presidential address.

The day was filled with knowledge-sharing sessions and interactive activities. One of the highlights was the Cybersecurity Awareness Quiz, which challenged participants to test their knowledge of cyber threats, security best practices, and digital safety. This quiz not only educated but also engaged students in a fun and interactive way.

The Crossword Mystery Games were another hit, allowing participants to explore the world of cybersecurity and technology through brain-teasing puzzles and riddles. It was a great way to spark curiosity and promote learning in an enjoyable manner.

A technical session on "Email Security and Forensics in the Modern Era" added depth to the event. Mr. Midhun Mohan M G, a Digital Forensics and Incident Response Analyst at EY, shared valuable insights on email security, modern forensic techniques, and incident response strategies. His expertise and real-world experiences left a lasting impact on the audience.

The event was made possible through collaboration with the Kerala Security Audit and Assurance Centre (KSAAC), which further reinforced the importance of unity and cooperation in achieving common goals.

Hack-X Tech Society of DUK is on a mission to shape the future of technology by fostering innovation, collaboration, and technical excellence. This grand inauguration was just the beginning, and the society has exciting plans for the future, including more engaging activities, workshops, and opportunities for tech enthusiasts to connect and learn.

As we embark on this journey, the Hack-X Tech Society of DUK is thankful for the support of the university administration, KSAAC, and the unwavering enthusiasm of the students and faculty. Together, we look forward to a future filled with groundbreaking technological advancements and shared knowledge.

Stay tuned for more updates from the Hack-X Tech Society of DUK as we continue to strive for excellence and innovation in the digital age.

Connect with us: https://linktr.ee/HackX_DUK





Online Lecture on 'Ecological responses to climate extremes in terrestrial environments'

In an enlightening session held on October 25, 2023, at 12:00 PM, the School of Informatics proudly hosted Dr. Madhav P Thakur, serving as the Assistant Professor and Head of the Terrestrial Ecology Division at the Institute of Ecology and Evolution, University of Bern, Switzerland.

Dr. Thakur's presentation provided a deep dive into the intricate world of terrestrial ecology, uncovering the latest advancements and research frontiers. Attendees gained valuable insights into the dynamic interplay between ecology and informatics.

🎓 Internship Success: Ms. Lakshmi Niranjana

The event also spotlighted Ms. Lakshmi Niranjana, a dedicated M.Sc. Ecology student specializing in Ecological Informatics (S3). Currently, Ms. Niranjana is interning under the expert guidance of Dr. Thakur, an opportunity made possible through the prestigious ThinkSwiss Research Scholarship.



Dr. Madhav P Thakur



Ms. Lakshmi Niranjana
M.Sc. Ecology (S3)
(specialisation in Ecological Informatics)

Blockchain 360- An Ambitious Initiative by Kerala Blockchain Academy

Kerala Blockchain Academy is gearing up for the "Blockchain 360" training series. It is an ambitious educational initiative aimed at empowering marginalised communities in the state of Kerala, India, starting from November 16, 2023. The initiative seeks to provide comprehensive training in blockchain technology via workshops, developer exercises, internship opportunities, job assistance and much more. The training is being organised in collaboration with the Kerala Knowledge Economy Mission (KKEM), dedicated to promoting knowledge-based industries and innovation within the state.

The primary objective of the Blockchain 360 training series is to bridge the digital divide by providing a 100% discount on learning opportunities for individuals from various marginalised groups, including Scheduled Castes, Scheduled Tribes, Transgender individuals, Fishermen, Differently-abled persons, Women candidates, and Women from Single-parent communities. Also, a 60 % discount on fees is offered to candidates applying through the Kerala Knowledge Economy Mission portal.

- Blockchain is a transformative technology that has the potential to create economic and social opportunities, and this initiative aims to ensure that no one is left behind in the blockchain revolution. The training series will feature a range of activities and learning modules designed to cater to participants from diverse backgrounds. Key highlights of the program include: In-depth training on blockchain technology, covering topics such as blockchain fundamentals, cryptocurrencies, smart contracts, types of blockchain and blockchain use cases.
- Practical Workshops to ensure participants gain practical experience in blockchain development and usage.
- Access to qualitative resources, including e-learning materials, online forums, and reference guides to enhance their learning experience.
- Certification on successful completion, which can assist candidates in pursuing career opportunities in the blockchain sector.

The "Blockchain 360" training series represents a significant step towards promoting digital inclusivity and economic empowerment among marginalised communities in Kerala. By offering specialised blockchain training and job assistance support, Kerala Blockchain Academy seeks to create opportunities for individuals who may have been historically underrepresented in the technology sector. It is expected that this training series will not only impart blockchain knowledge but also open doors to economic self-sufficiency, entrepreneurship, and innovation among its participants. KBA's job portal will connect learners with tailored opportunities, providing them with the skills and resources to secure meaningful employment in the blockchain sector.

Invited Talk Series Conducted by Centre for Bio AI

The Centre for Bio AI, School of Digital Sciences, DUK, conducted an invited talk series on the 5th and 7th of October 2023 for the students of MSc Data Analytics and Bio AI. On 5th October, an online session on "Leveraging machine learning applications combined with physics-based modeling for drug discovery" was conducted by Koushik Kasavajhala, a computational biologist/chemist and programmer at Schrödinger. He discussed the applications, discovery pipelines, diverse therapeutic modalities, drug discovery essentials, machine learning for small molecule drug discovery, predicting molecular properties, DeepAutoQSAR for prediction, molecular dynamics simulations, Large Language Models at Schrödinger, and so on. The session provided deep insights into the implementation of machine learning in drug discovery.

On 7th October, an interactive session on Statistical Methods, Applications, and Opportunities was conducted from 10 am to 12 pm by Dr. Jagathnath Krishna, Assistant Professor in Biostatistics at RCC. He provided a detailed overview of different techniques used in biostatistics, explained the implementation of various statistical models in data analysis, and demonstrated how these techniques are utilized for cancer data analysis at RCC. The session offered valuable insights into various applications in the field of biostatistics and the associated job opportunities. On the same day afternoon, we conducted a virtual talk with Dr. Girinath Pillai, lead scientist at Sygnature Discovery UK, highlighting the role of Machine Development and Deep Learning in drug discovery. He was one of the coordinators and mentors for the Government of India's Drug Discovery Hackathon 2020. He mainly discussed topics like drug discovery challenges and the use of AI and machine learning in drug design. He detailed topics like AI, which is being used in drug discovery to analyze large amounts of data and identify potential drug candidates. The session was fruitful since it highlighted the key points of drug discovery and also helped the students enhance their knowledge of the drug discovery field.



Talk on Career Catalyst: Navigating the Corporate World

On October 19th, 2023, the Training and Placement Cell at DUK organized a talk on Career Catalyst: Navigating the Corporate World. The talk was given by Mr. Vishnu Suresh, Head of HRBP-Transportation, Healthcare, Systems, and Corporate Functions. The talk aimed to provide tips to students for molding themselves for the corporate world.



Certified Ethical Hacker Training at DUK

The Certified Ethical Hacker (CEH) Training Program commenced at our university campus on October 12, 2023. This program is designed to equip students with the skills and knowledge needed to identify and counter potential cybersecurity threats, making it an excellent opportunity for those interested in pursuing a career in ethical hacking or enhancing their understanding of cybersecurity practices.

The training is organized by Kerala Security Audit and Assurance Centre (KSAAC) in partnership with EC Council International. This is the first batch of CEH certification, and KSAAC is planning to start additional batches for alumni, DUK/IIITMK staff, and external delegates. If you haven't registered for the CEH training, there may still be opportunities to join. Please contact KSAAC at ksaac@duk.ac.in for more information on availability and registration.

Workshop on Endnote Software

Knowledge Centre DUK conducted a highly successful workshop on Endnote Software, offering participants a valuable learning experience on Thursday, October 12, 2023, from 3:00 PM to 4:30 PM at, DUK.

The workshop, led by Dr. Gopakumar V, Head of the Knowledge Centre at Digital University Kerala, provided attendees with a comprehensive exploration of the intricacies of Endnote Software. Through this program, participants had the valuable opportunity to enhance their research and referencing skills under the expert guidance of Dr. Gopakumar.



Invited Talk

Dr. Sini V. Pillai Delivered a lecture on India's emerging Gig Economy: Building capabilities for a Just in Time Workforce as a part of the two-day National Seminar on Labour Market Transformation and Employment Prospects in India at Govt. Victoria College Palakkad on 12 Oct 2023.

DUK Co-Organizes Globelics International Conference 2023

DUK co-organised the 20th Globelics International Conference 2023 in GIFT, Thiruvananthapuram. The Globelics network started twenty years ago, with the first international conference in Rio de Janeiro in 2003. The Network's main aim is to focus on Learning, Innovation and Competence-building Systems (LICS) to understand the nexus between innovation and development.

Prof Saji Gopinath, Vice Chancellor, DUK was a member of the In-Country Steering Committee of the conference. He co-chaired a plenary session with Ann Kingri, Secretary General, Africalics, on "Innovation System for a Knowledge Economy in India: National and Sub-National Initiatives and Challenges for India".

Pradeep Kumar K, Assistant Professor, SoDiHLA, chaired the session "IR 4.0 and Development: Digitalization and automation, productivity and employment implications".

Globelics 2023 received around 320 submissions from 58 countries. After the double-blind review process, 210 papers were selected. The presenters represented 48 countries. The conference had two keynote speakers, 4 plenaries, 10 special sessions, and regular paper submissions. The conference had more than 300 participants.



MoU Signed Between Department of Archaeology and DUK

The Centre for Digital Transformation & Innovation (CDTI) of Digital University Kerala is developing a Centralized e-ticket Issuing and Monitoring System (CeTMS) for the Department of Archaeology, Govt. of Kerala. An MoU was signed between Department of Archaeology and DUK for the development of CeTMS, which will be a state-of-the-art system for the all the museums of the state.

Technical Session Delivered

K Pradeep Kumar, Asst. Professor, School of Digital Humanities & Liberal Arts, delivered a technical session on the topic “Digital Infrastructure for Public Good-What India Has Got to Offer the G20?” in the ICSSR Sponsored Two-Day National Seminar -India’s G20 Presidency: Scope for Strengthening Peace and Sustainable Development, Organized by Post Graduate Department of Economics, Nirmala College Muvattupuzha, on October 3, 2023 at Nirmala College, Muvattupuzha, Kochi.



Technical Session Delivered

A session on "Business Etiquettes" was organized by the School of Digital Humanities & Liberal Arts (SoDiHLA) on October 19, 2023, for all the Master's Program students of DUK. The session was taken by Sarah Kallungal, Content Anchor, in the Life Sciences unit of Tata Consultancy Services.



UST Recruitment Drive for MTech students

UST conducted Initial Screening test to the students of MTech Computer Science and Engineering as a part of their Campus Recruitment Drive. The online recruitment test was at our Campus and was attended by 8 students

Social Engagement Centre

Inauguration of the Digital Literacy Campaign

Prof. Saji Gopinath, Hon'ble Vice Chancellor of the Digital University Kerala, inaugurated the Digital Literacy Campaign initiated by the Pothencode Panchayat with the assistance of the Social Engagement Centre, DUK in the presence of the Hon'ble Minister for Food and Civil Supplies Shri G.R. Anil. In a special function in the Pothencode town on 14th of October 2023, the esteemed Vice Chancellor spelt out the importance of digital literacy and education and the need for spreading the awareness on digital technology. He promised the assistance of the Social Engagement Centre and the DUK in such endeavours. Pradeep Kumar, Coordinator of the Social Engagement Centre explained the plan of action of the Centre in helping the three wards -Edathara, Pothencode Town and Puliveedu- in attaining the status of fully literate wards within a certain time period.



SEC's Meet-Up Day Ignites Student Volunteerism

Volunteers of the Social Engagement Centre of DUK had a meet-up, especially for the new students to get to know each other and the SEC on 10th October at the Gallery hall no.45. More than a hundred students participated in the event and affirmed their interest in volunteering. SEC core team organised games as an opportunity for the students to get to know themselves and break the ice. .

Pradeep Kumar, Coordinator of the Social Engagement Centre introduced the activities and objectives of the SEC to the new volunteers. He distributed the prize to the winners of various competitions organised by the SEC as part of the World Environment Health Day Program, including the quiz competition and photography contest



Digital Literacy Campaign

Digital University Kerala and Pothencode Panchayat joined hands to make three wards, Edathara, Town Ward, and Puliveedu of Pothencode Panchayat, fully digitally literate wards. As part of this endeavour, the Social Engagement Centre (SEC) volunteers provided training to 110 individuals who were not digitally literate. First phase of the campaign focused on marginal sections of the population and included MGNREGS groups.

In addition, SEC volunteers visited 40 households in the Palottukonam colony to identify those who require digital literacy and offered training. Each day, over 30 SEC volunteers participated in the Digital Literacy Campaign. The participants who were mainly older citizens showed curiosity about smartphones and their functions. The volunteers gained unique experiences within the community.



Experience of Digital Literacy Campaign led by SEC

Bridging the Digital Divide Through Community Engagement

The Digital literacy campaign led by the Social Engagement Centre at DUK in collaboration with Pothencode panchayat has proven that there is much to learn outside the classroom. The community visit for the Digital Literacy Campaign was a new experience. The community was the same as my community, but this time, my viewpoint was different, and it gave me a different perspective about the community.

When our fieldwork guide briefed us about the digital literacy campaign, it was simple: We just needed to show our smartphones and teach them the basics. But when we started interacting with the community, we understood the complexity of teaching digital literacy to senior citizens. Most things we thought were easy and familiar were complex and new to them. Even though most of the community members gathered there were curious about smartphones and their uses, few restricted themselves from learning. We haven't done great work there, but what we did was great for the community.

Most people do not have smartphones, but they have seen it from their children and grandchildren. However, they never had the guts to ask their children to teach them and buy them a smartphone. We also have seen our parents and grandparents find it challenging to learn digital devices. In this world where everything is digital, we must ensure that no one is left behind. They have taught us many things, and this time, to give back to them.



Celebrating Gandhi Jayanthi: Digital Literacy Awareness Programme

Common citizens lack awareness of digital literacy and its use despite the progress the country has made in digital technology. With the aim to focus on the marginalized sections of the population on Gandhi Jayanthi, a digital literacy awareness programme was conducted in Pothencode Panchayat in collaboration with the Citizen Digital Foundation . Over 50 individuals participated in this programme, majority of them being women. The Citizen Digital Foundation provided guidance on the precautions necessary while using digital devices, aiming to enhance people's understanding and knowledge on the matter.



SPAx Funding for IEEE SB DUK

IEEE SB DUK received SPAx funding of \$100 USD from IEEE to conduct SPAx event IEEE Conciencia'23 at the University.

Students Council

Happiness Hub - Mind Relaxing Session Related to World Mental Health Day

The “Happiness Hub” workshop, hosted by the Students Council of Digital University of Kerala on October 12, 2023, featured Saleena S, Hope Coach and Happiness Mentor from Nila School of Happiness. Saleena’s workshop was about finding happiness and dealing with difficult situations like traumas. She also shared practical Insights in her workshop. Saleena encouraged attendees to spot negative thoughts and replace them with positive ones, emphasizing that shifting your mindset can make a real difference. She also mentioned the need for self-love and self-appreciation. Practicing gratitude and compassion were all highlighted as simple but effective ways to boost happiness.

In discussing trauma, Saleena stressed the value of talking about your experience with someone you trust. And if things get tough, don't hesitate to seek help from a professional. She also referred to first aid for mental trauma, which can be done from home. She teaches us the way to deal with people who face serious trauma. Which consists of three steps: look, learn, listen. To drive her point home, Saleena shared one of the letters which she got from her client. And asked the audience how they all will do when they face a situation like that.

Overall, the “Happiness Hub”workshop was a valuable, approachable, and inspiring experience for all who participated. Saleena provides practical, everyday advice on happiness and dealing with trauma, reminding everyone that improving one, 's well-being is achievable, even with life challenges.



Aaranyakam Wildlife Week Celebration

The event kicked off at sharp 10 am on the 5th of October with the inauguration ceremony at Gallery Hall 44, overseen by Dr. A Mujeeb, Registrar of DUK. In a captivating moment, Dr Mujeeb cut the ribbon for the official opening of the exhibition stalls. Following this, the invited talk by Dr. E.K Easwaran, Retd. chief veterinary officer, Kerala State, India where he spoke on the importance of human-wildlife conflict from the one-health perspective.



By 11.30 am the major competitions started. Around 157 students participated among which 39 students were from other universities. Nandhu and Team won the prize in this competition. The exhibition stalls were also part of the event. Different vendors who promote eco-friendly products were invited to put up stalls. Sanchi Bags accepted our invitation and generously contributed to the event. An NGO - PCFML - which focuses on conservations also has a stall to showcase their works Two stalls were conducted by the students where they could showcase their crafts and a game stall was part of the exhibition. At noon, a Quiz competition was conducted in which 66 students participated, Rahul Raj PV and Benitto Angelose won the first and Rabiya and Atul Krishna of Kerala University won the second. After the inquisitive quiz competition, a Hackathon on the topic of Human-Wildlife Conflict was conducted. Ms Aiswaria GR, Mr Arjn CP and Mr Akshay Moti were the judging panel for the hackathon. Three teams participated and Team Wobble won the first prize followed by Team Aloha and Team GB won the second. Photography competition and Reels competition were online competitions which were participated by students of both Digital University Kerala and other students from all over India. The entries from photography competitions were also displayed in the photography exhibition along with photos of wildlife photographers. The event was concluded by Dr Mujeeb, the registrar of DUK, Md. Meraj Uddin, Chairman of Students' Affairs of DUK and felicitated the photographers for their valuable support and contributions and the prizes for the winners were distributed. The event came to closure at around 5 pm with the photography sessions. True to its name, the event celebrated wildlife and has successfully helped to spread the importance of wildlife through the different competitions and exhibition.





UNIVERSITY ARTS DAY

The first-ever University Day of DUK, held on 15th of October 2023, planned and executed by the Student Council was a striking success. The day kicked off with a series of captivating dance and music performances including Nadanpatt and Qawwali by the ever talented students of DUK. In the afternoon, the special guest, Akhil P Dharmajan, co-writer of India's Oscar entry movie 2018 and Author of Bestselling novel Ram c/o Anandhi, graced the event. He officially inaugurated the university's Film Club, named 'CleanCut Cinemas'. This addition to the university's extracurricular offerings promises to be a hub for aspiring filmmakers and cinema enthusiasts. Then Akhil P Dharmajan shared his insights and experiences during an engaging Q&A session. His words of encouragement inspired the budding film enthusiasts of the campus. Following the inauguration, the Film Club members staged a remarkable drama as their inaugural event. The performance was well-received and showcased the club's commitment towards the art of storytelling and dedication to creating compelling narratives. Soon after that the cultural performances continued with various song and dance performances. Later on a Fashion Show began and mesmerizing models of DUK showcased the stage. The University Day came to a close with a high-energy DJ performance. The entire hall came alive with pulsating lights and music, creating an electrifying atmosphere that lit the spirit of celebration, leaving everyone with an unforgettable and enjoyable day.







School of Electronic Systems and Automation Visited Bethal Gram Old Age Home

School of Electronic Systems and Automation 2023 Admission MSc and MTech students visited Bethel Gram Old Age Home, Mukkola, Kallayam P.O., Thiruvananthapuram in connection with their course 'Creativity and Arts for Engineering Sciences'.



PUBLICATIONS



Conference Paper

- Nikhil V. Chandran, V. S. Anoop, Asharaf S., "Textual semantics analysis using string kernels-based spectral clustering with incremental hierarchical topic clustering", 23rd International Conference on Intelligent Systems Design and Applications (ISDA 2023), Lecture Notes in Network and Systems, Springer.
- Umasankar R, Vimal D Kumar, Pradeep Kumar K, "Digital Transformation in the Government - An Analysis of the India Stack" at the ICSSR Sponsored Two- Day National Seminar - INDIA'S G20 Presidency: Scope for Strengthening Peace And Sustainable Development, Organized by Post Graduate Department of Economics, Nirmala College Muvattupuzha, Kerala on October 3-4, 2023 at Nirmala College, Muvattupuzha, Kochi. The paper was presented in the seminar by Umasankar R, Sr Research Associate, Centre for Digital Transformation & Innovation (CDTI), DUK.
 
- Deepthimol N K, Pradeep Kumar Kalampukatt, Vimal D Kumar, Kiran Kumar Kakarlapudi, "Does National Innovation Capacity Lead to Reduction in Income Inequality? Empirical Evidence from Panel Data Analysis" at the 20th Anniversary Globelics International Conference 2023 in GIFT, Thiruvananthapuram, 11-14 Oct., 2023. The paper was presented in the conference by Vimal D Kumar, Research Associate, Centre for Digital Transformation & Innovation (CDTI), DUK .
 
- Vimal D Kumar, Deepthimol N K, Pradeep Kumar K, Kiran Kumar Kakarlapudi, "Pathways to Equitable Prosperity: Investigating the relationship between Innovation and Income Inequality" at the Asia Pacific Innovation Conference (APIC) 2023, Ahmedabad University, Ahmedabad, Gujarat held during Oct 19-21, 2023. The paper was presented in the conference by Pradeep Kumar K, Coordinator, Centre for Digital Transformation & Innovation (CDTI), DUK .



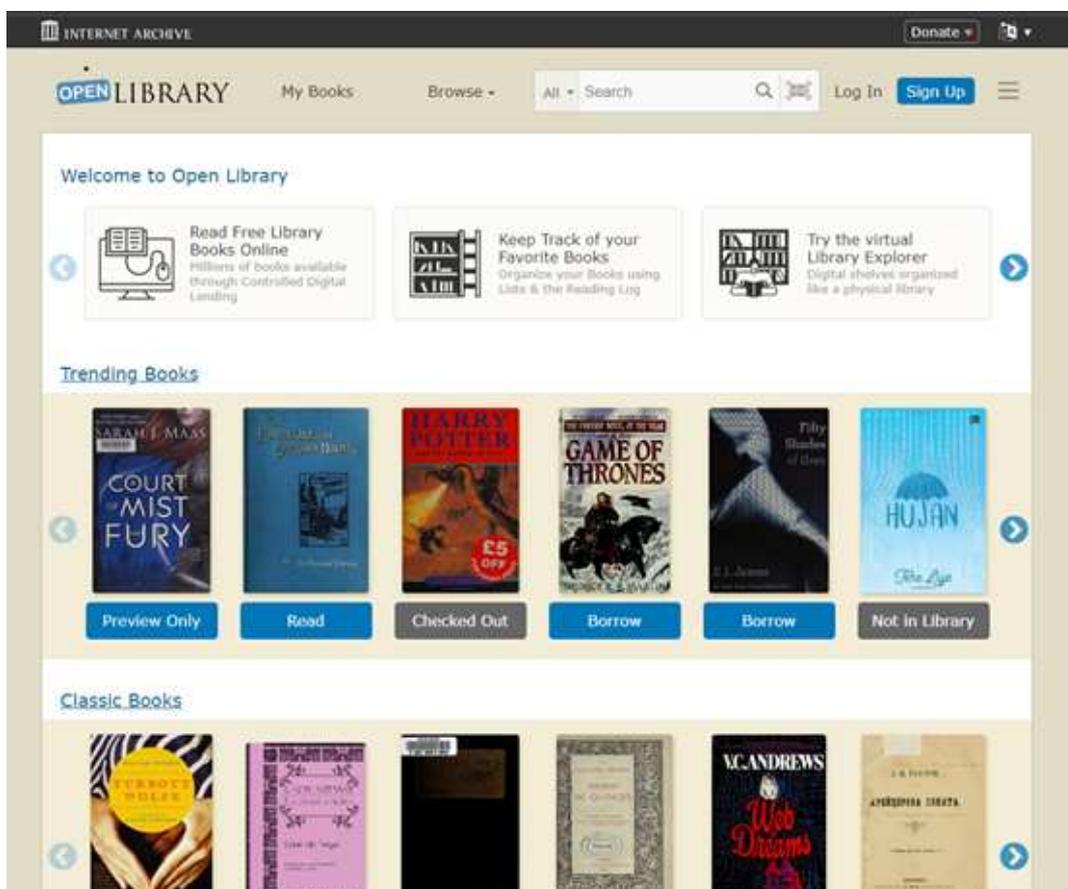
Website of the Month

Open Library

(<https://openlibrary.org/>)



Open Library is a universal catalogue for book metadata. The Goal of Open Library is to create a web page for every published book. They call it “Open Library” because it is a collaborative open-source initiative, meaning anyone can use and contribute to the Open Library catalogue. In this way, Open Library opens the doors to the places where you can find the book you’re looking for. Open Library is an initiative of the Internet Archive, a 501(c)(3) non-profit library of Internet sites and other cultural artefacts in digital form. Open Library contains information about books. Internet Archive hosts a collection of digitized books. Open Library’s universal catalogue provides links to discover, borrow, and read from the Internet Archive’s collections. Your Internet Archive account can be used to sign in to Open Library.



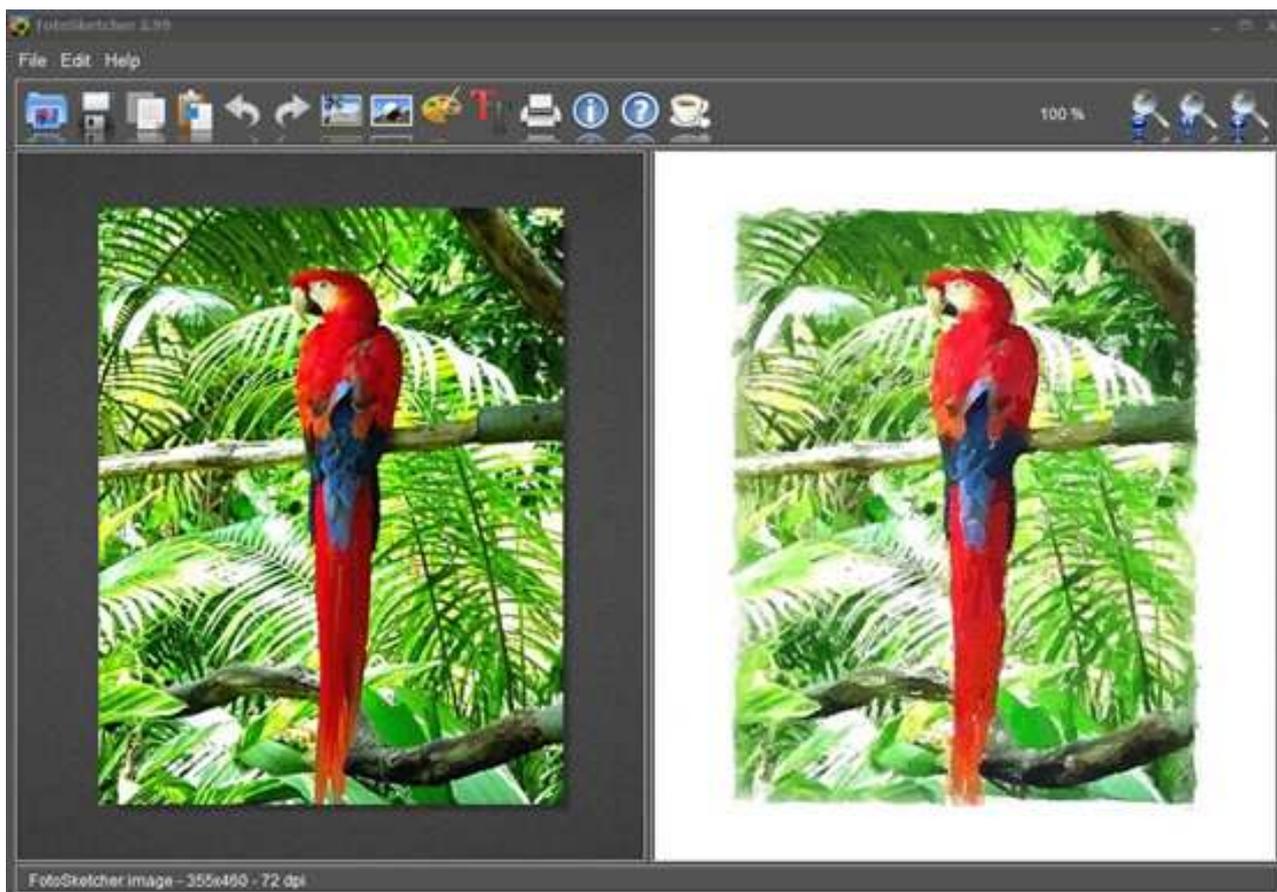
Software of the Month

Fotosketcher

(<https://fotosketcher.com/download-fotosketcher/>)



FotoSketcher is a 100% free program for Windows (there is also an experimental version for MacOS), which converts your digital photos into art automatically and in just a few mouse clicks. Over 20 styles are available, from pencil sketches to watercolour or oil paintings, pen & ink drawings, abstract art and cartoons. From photo to painting (landscapes, architecture, portraits, etc.) in seconds..! You can also improve your original photos with simple tools (enhance contrast, sharpen, simplify image, increase luminosity, color saturation etc) and add simple or realistic frames and text.



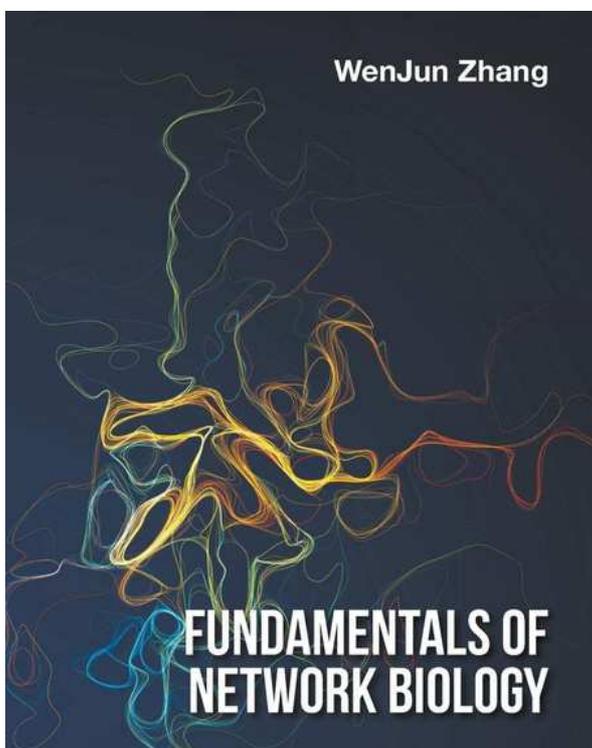
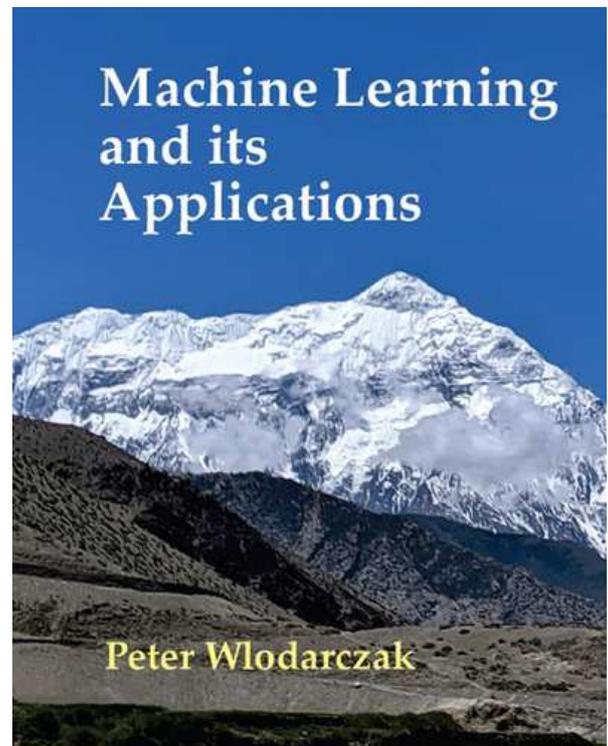
New Additions to the Knowledge Centre Collection

Machine Learning and its Applications

In recent years, machine learning has gained a lot of interest. Due to the advances in processor technology and the availability of large amounts of data, machine learning techniques have provided astounding results in areas such as object recognition or natural language processing. New approaches, e.g. deep learning, have provided groundbreaking outcomes in fields such as multimedia mining or voice recognition. Machine learning is now used in virtually every domain and deep learning algorithms are present in many devices such as smartphones, cars, drones, healthcare equipment, or smart home devices. The Internet, cloud computing and the Internet of Things produce a tsunami of data and machine learning provides the methods to effectively analyze the data and discover actionable knowledge.

Source :Amazon

Iodarczak, Peter (2020) *Machine Learning and its Applications*, Boca Raton, CRC Press.



Fundamentals of Network Biology

As the first comprehensive title on network biology, this book covers a wide range of subjects including scientific fundamentals (graphs, networks, etc) of network biology, construction and analysis of biological networks, methods for identifying crucial nodes in biological networks, link prediction, flow analysis, network dynamics, evolution, simulation and control, ecological networks, social networks, molecular and cellular networks, network pharmacology and network toxicology, big data analytics, and more. Across 12 parts and 26 chapters, with Matlab codes provided for most models and algorithms, this self-contained title provides an in-depth and complete insight on network biology. It is a valuable read for high-level undergraduates and postgraduates in the areas of biology, ecology, environmental sciences, medical science, computational science, applied mathematics, and social science.

Source :Amazon

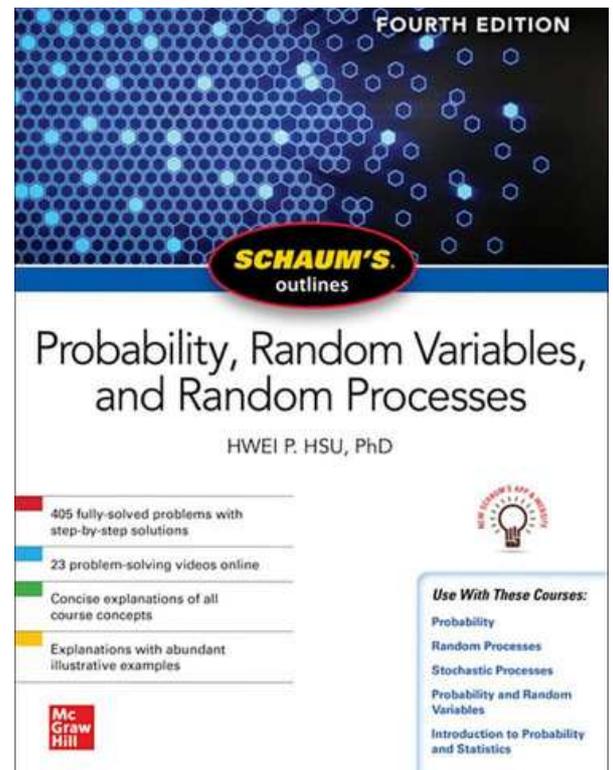
Zhang, Wenjun (2018) *Fundamentals of network biology*. Europe, World Scientific.

Schaum's Outline of Probability, Random Variables, and Random Processes

More than 40 million students have trusted Schaum's to help them succeed in the classroom and on exams. Schaum's is the key to faster learning and higher grades in every subject. Each Outline presents all the essential course information in an easy-to-follow, topic-by-topic format. You also get hundreds of examples, solved problems, and practice exercises to test your skills.

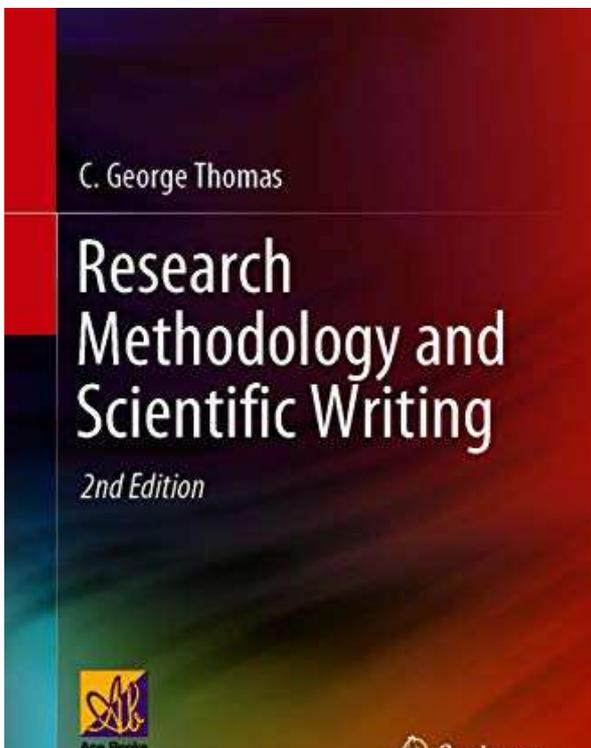
This Schaum's Outline gives you

- 405 fully solved problems
- Clear, concise explanations of all probability, variables, and processes concepts
- Support for all the major textbooks in the subject areas
- Fully compatible with your classroom text, Schaum's highlights all the important facts you need to know. Use Schaum's to shorten your study time--and get your best test scores!



Source :Amazon

Hsu, Hwei P (2020) *Schaum's Outline of Probability, Random Variables, and Random Processes*. New York, McGraw Hill Education.



Research Methodology and Scientific Writing

This book presents a guide for research methodology and scientific writing covering various elements such as finding research problems, writing research proposals, obtaining funds for research, selecting research designs, searching the literature and review, collection of data and analysis, preparation of thesis, writing research papers for journals, citation and listing of references, preparation of visual materials, oral and poster presentation in conferences, and ethical issues in research. Besides introducing library and its various features in a lucid style, the latest on the use of information technology in retrieving and managing information through various means are also discussed in this book. The book is useful for students, young researchers, and professionals.

Source :Amazon

Thomas, C. Georg (2021) *Research Methodology and Scientific Writing*. Switzerland, Springer.

Explainable AI for Practitioners: Designing and Implementing Explainable ML Solutions

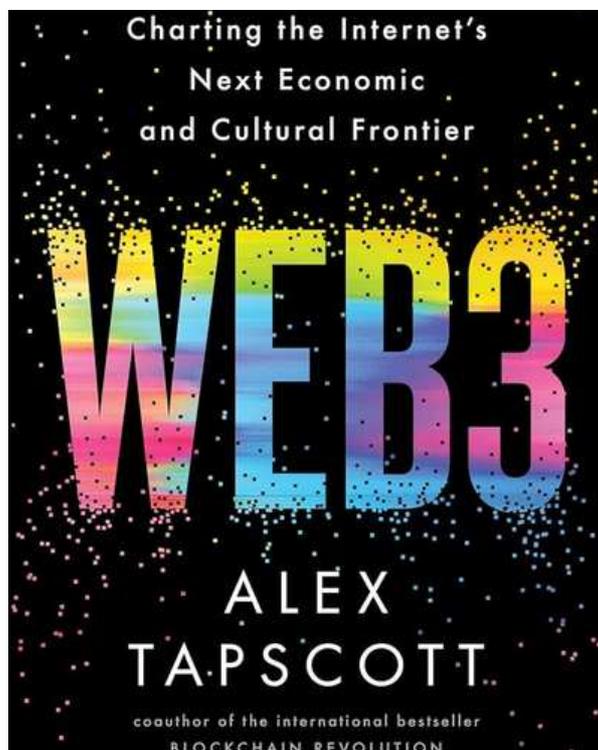
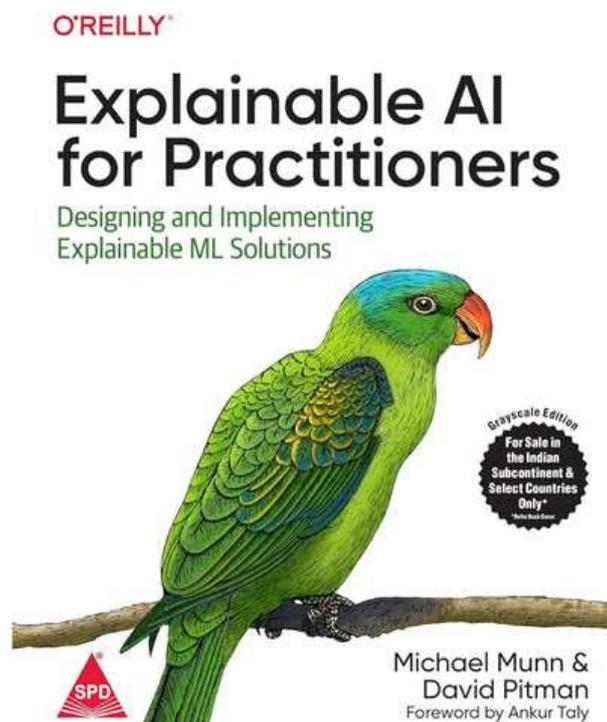
Most intermediate-level machine learning books focus on how to optimize models by increasing accuracy or decreasing prediction error. But this approach often overlooks the importance of understanding why and how your ML model makes the predictions that it does. Explainability methods provide an essential toolkit for better understanding model behavior, and this practical guide brings together best-in-class techniques for model explainability. Experienced machine learning engineers and data scientists will learn hands-on how these techniques work so that you'll be able to apply these tools more easily in your daily workflow.

This essential book provides:

- A detailed look at some of the most useful and commonly used explainability techniques, highlighting pros and cons to help you choose the best tool for your needs
- Tips and best practices for implementing these techniques
- A guide to interacting with explainability and how to avoid common pitfalls
- The knowledge you need to incorporate explainability in your ML workflow to help build more robust ML systems
- Advice about explainable AI techniques, including how to apply techniques to models that consume tabular, image, or text data
- Example implementation code in Python using well-known explainability libraries for models built in Keras and TensorFlow 2.0, PyTorch, and HuggingFace

Source :Publisher

Munn,Michael (2023)*Explainable AI for Practitioners: Designing and Implementing Explainable ML Solutions*,USA, O'Reily.



WEB3: Charting the Internet's Next Economic and Cultural Frontier

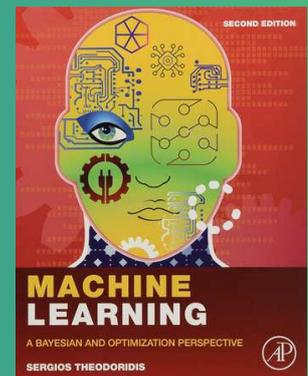
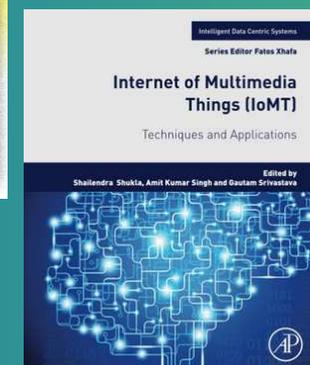
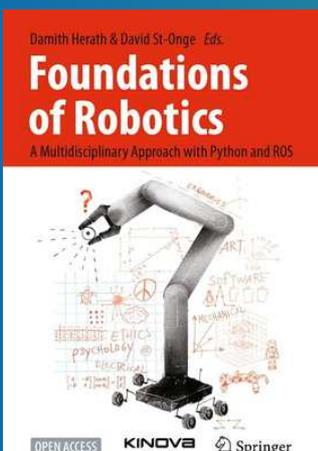
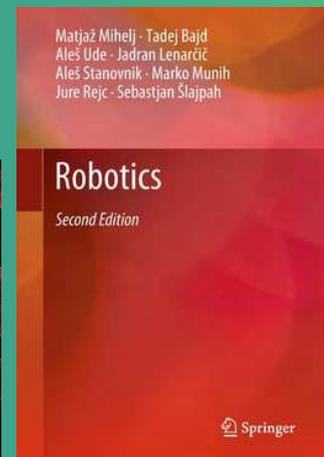
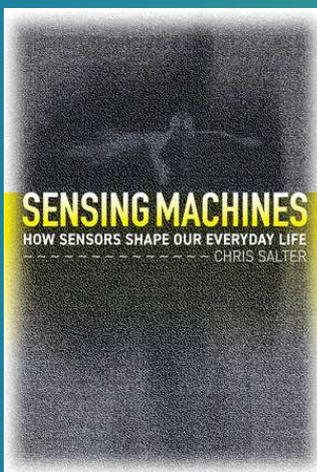
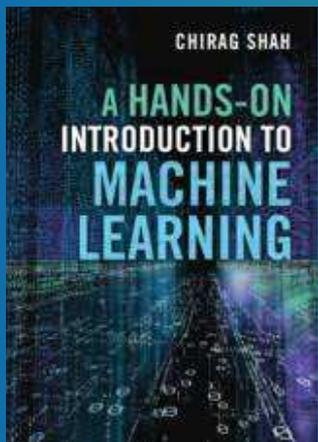
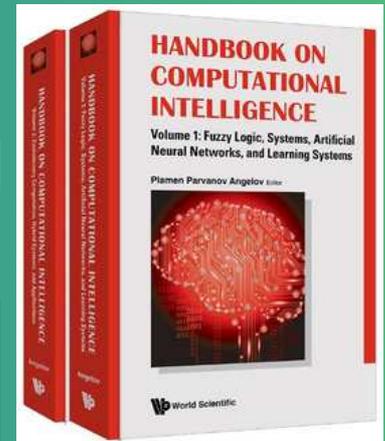
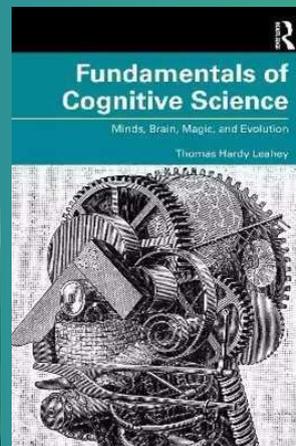
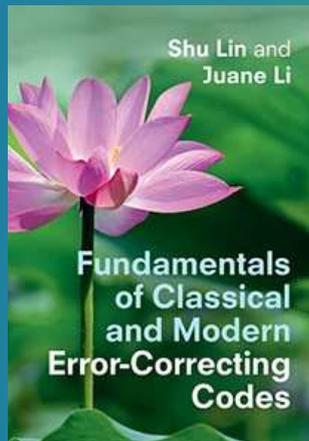
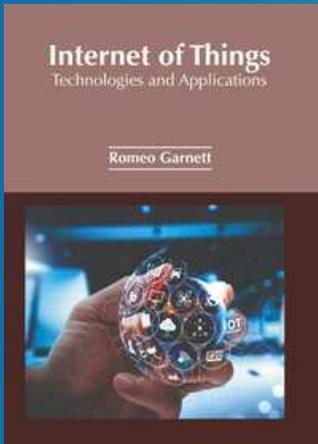
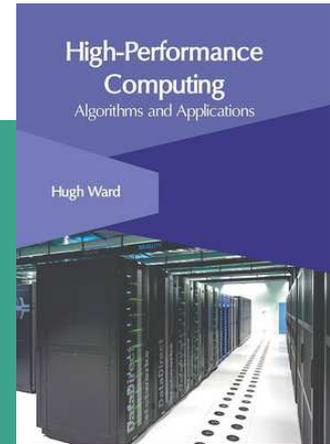
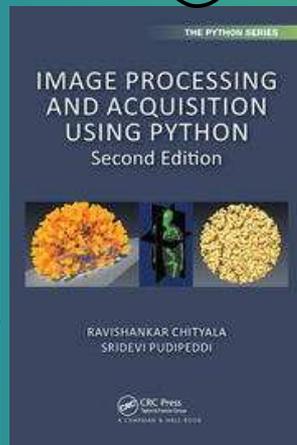
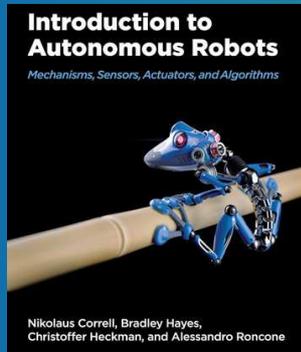
Web3 the “Read-Write-Own Web”—a decentralized Internet where individuals own their own identities and can securely trade assets like money, securities, intellectual property, and art peer to peer. Made possible by blockchains, the foundational technology of bitcoin, Web3 promises the biggest shake up of business since the invention of double-entry bookkeeping in the Middle Ages. It is the Internet’s new frontier. In Web3, award-winning author and technology investor Alex Tapscott provides a cutting-edge guide to the Internet’s next era. Covering everything from the metaverse and non-fungible tokens to DAOs, decentralized finance, and self-sovereign identity, this indispensable, forward-thinking book describes the building blocks and often hidden technologies that will be foundational to our cultural and economic progress.

Source :Publisher

Tapscott,Alex (2023) *WEB3: Charting the Internet's Next Economic and Cultural Frontier*. Newyork, Harpercollins publishers.

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