

DIGITAL UNIVERSITY KERALA

Kerala University of Digital Sciences, Innovation and Technology

NEWSLETTER

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NSS Special Camp "Sparsham"

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BlockHash Live 2023



The 6th edition of BlockHash Live, Kerala's Annual Blockchain Summit, titled "Web 3.0 Nexus 2023," was hosted by the Kerala Blockchain Academy on December 15, 2023, at Park Centre, Technopark, Thiruvananthapuram. Over 300 enthusiasts participated in the event, which was inaugurated by Dr. Rathan U Kelkar, IAS, Secretary to Electronics and Information Technology. The keynote address was delivered by Prof. Sandeep Kumar Shukla from IIT Kanpur. BlockHash Live 2023 focused on industry-centric events revolving around Web3 Innovation, Entrepreneurship, and Society. The summit showcased the adoption and integration of innovative decentralised technologies, blockchain, and Web3 protocols across various sectors. Notable practices of Web 3 were demonstrated by KBA alumni startups such as TrackGenesis and Cryprise.

In conjunction with the summit, a student workshop called "Beyond the Blocks" and a Faculty Development Program (FDP) was organised. The student workshop, conducted in collaboration with Metaschool & Starknet Foundation, aimed to provide students with a fundamental understanding of industry-level web applications, back-end and front-end development, and blockchain integration. The Faculty Development Program, associated with Wiley India Private Limited, witnessed a warm response from the academic crew who participated from different corners of the nation.

The event also featured the convocation ceremony for the 1st batch of the Blockchain Excellency Program of Kerala Blockchain Academy. BlockHash LIVE 2023 also included the announcement of two new courses by KBA: "Developer Essentials for Blockchain" and "Certified Ethereum Network Administrator".



KBA-Wiley Book Launch: Blockchain Applications & Algorithms



Another milestone for Kerala Blockchain Academy!

Kerala Blockchain Academy, a Centre of Excellence of Digital University Kerala, in collaboration with Wiley Publishers, has launched its pioneer book on “Blockchain Technology: Algorithms and Applications” authored by Prof. (Dr.) Asharaf S, Sivadas Neelima, Adarsh S, and Franklin John. The book was launched at the sixth edition of the annual Kerala Blockchain summit “BlockHash Live 2023” by Ms. Vibha Mahajan, Senior Director (India Business Head - Academic Learning), Wiley and the first copy was received by Dr. Rajasree M S, Director, Directorate of Technical Education.



Industry Session: Product Vision and Strategy

The School of Digital Humanities & Liberal Arts organized an industry session on "The Art of Product Vision and Strategy" on Dec 21, 2023. The speaker, Parvathy Nandakumar, Product Manager and Innovation Specialist at Reflections Global, enlightened the students on developing a product vision, driving innovation and formulating an effective product strategy. The session was highly interactive with several industry examples and cases.



Empowering Governance: Capacity Building in AI & DA Batch-3 Wraps Up with Project Showcases and Joyful Year- End Celebrations

Capacity Building in AI & DA Batch -3 concluded with project presentations, Christmas and new year Celebration by the participants.

Expert instructors from Digital University Kerala (DUK) delivered a comprehensive curriculum tailored to equip government officials with cutting-edge skills in AI and DA. The program's focus on practical applications and real-world scenarios ensures that participants are well-prepared to navigate the complexities of governance in an era defined by technological advancements.



Funded by the IT Mission and co-ordinated by Dr.Elizabeth Sherly(DUK), the Capacity Building program underscores a commitment to empowering government officials with the requisite skills for the rapidly evolving landscape of AI and DA. As technology continues to shape governance practices, equipping officials with these skills becomes imperative for effective decision-making and service delivery.

The successful conclusion of this program reflects not only on the participants' determination but also on the collaborative efforts of DUK and the IT Mission to bridge the knowledge gap and foster innovation within government sectors.



Live Webinar on Environmental Resource Planning & Management

School of Informatics - Digital University Kerala is conducted a live Webinar on 'Environmental Resource Planning & Management' on 12 Dec 2023, Tuesday at 02:30 pm. Speaker: Dr. Bindu J. S., Kerala Agricultural University, Integrated Farming System Research Station.

Online talk as part of National Pollution Control Day- DROPS OF WISDOM: UNDERSTANDING AND CONFRONTING WATER POLLUTION

School of Informatics - Digital University Kerala and Institution's Innovation Council organised online talk- DROPS OF WISDOM: UNDERSTANDING AND CONFRONTING WATER POLLUTION as part of National Pollution Control Day. Talk was given by Environmental Expert, Mr. Haneesh K. R., CEO, Biocenosis Envirotech. The talk encompassed subjects such as the causes of pollution and diverse approaches for alleviating it with a focus on water pollution.

Empowering Women Entrepreneurs: Navigating the Digital Frontier at NIT Calicut

Dr. Sini V. Pillai delivered a session at NIT Calicut as part of a capacity-building program for women entrepreneurs. The focus of the session was on customer management through social media platforms, with a keen emphasis on analyzing customer needs and sentiments through social media. Engaging with the dynamic women entrepreneurs of Calicut was an incredible experience, and their enthusiasm for digital marketing and e-commerce was truly inspiring. The session aimed to equip these talented women with the tools and insights necessary to navigate the ever-evolving landscape of online business.



NSS Special Camp

"Sparsham: A Transformative Seven-Day NSS Camp -Digital University Kerala"

Digital University Kerala conducted its first ever NSS camp, “ Sparsham, “ at the Mar Ivanios Bethany Vidyalaya in the Bhaskar Nagar ward of Athiyannoor, one of the five adopted villages of DUK, for a week, 24-30, 2023. Thirty-six DUK students participated in this transformative week-long experience. The camp featured activities aimed at providing social service and helping participants with personality development. The Hon’ble Registrar of DUK, Prof. A. Mujeeb, inaugurated the camp on December 24, 2023, at the Mar Ivanios Bethany Vidyalaya campus. Mr. V.P. Sunil Kumar (Athiyannoor Panchayat President), Mr. Premraj (Ward Member, Bhaskar Nagar), Ms. Sunitha Rani (Vice President, Athiyannoor Block Panchayat) and Mr. Pradeep Kumar K., Programme Officer, DUK also participated in the inaugural function.

The major project during the camp involved establishing a library in the Bhaskar Nagar colony. Volunteers from the Social Engagement Centre have been gathering books from students, faculty, and various organizations with a view to provide the library with the best possible collection of reading material. NSS volunteers organized the books and set up the library with the assistance of the Knowledge Centre, Digital University Kerala.



On 25th December NSS volunteers joined the Bhaskar Nagar Community in celebrating Christmas. School children from Pullampara Panchayat accepted an invitation extended by the NSS Unit of DUK to showcase their talent before the Athiyannoor community. Student artists presented a well-scripted docudrama addressing themes such as waste management, drugs, and the role of youth in the Indian Independence Movement, adding a message of social responsibility to the entire celebration.

Additionally, as part of the "Sneharamam Project," NSS volunteers cleaned the Anganwadi and the town of Bhaskar Nagar. They conducted household visits to educate residents about the proper methods of diaper disposal. Simultaneously, the volunteers carried out a household survey using the mobile app developed by Digital University Kerala to gain insights into the community. During the survey, the volunteers also conducted a digital literacy campaign to make people aware of the importance of digital literacy.



An indoor session was conducted to reinforce students' leadership skills, communication abilities, and teamwork. Mr. Vinod Damodaran, Founder & Director of Consultise Consulting Solutions Pvt Ltd, an organization specializing in Learning and Development (L&D), Organizational Development (OD) interventions, and Business Consulting, led participants through various activities.

These activities included designing superhero posters, engaging in hula hoop games, and enhancing interpersonal and leadership skills. Practical takeaways from the session encompassed adaptability, time management, empathy, and effective communication.

Additionally, volunteers participated in a first aid and fire safety training program conducted by the Department of Fire and Rescue, Neyyattinkara. They also attended a session by the Haritha Keralam Mission on the contribution of youth to a waste-free Kerala. Participants showcased their talent during the specific time dedicated to the purpose in the evenings. There were talented singers and dancers.

A campfire was organized on the last evening of their stay on 29th December and was enjoyed by all the participants. On 30th December 2023, marking the conclusion of the seven-day camp, Prof. Saji Gopinath, Hon'ble Vice Chancellor of Digital University Kerala, officially dedicated the Library to the community. The function took place in the presence of esteemed individuals, including Prof. Satheesh Kumar (Faculty, DUK) and Prof. Pradeep Kumar (NSS Programme Officer, DUK), Mr. Sunil Kumar (Athiyannoor Panchayat President), Mr. Premraj (Ward Member, Bhaskar Nagar), and Dr. Sreelekha Nair (Consultant, SEC).

The seven-day camp proved to be a transformative experience for the students. Prof. Pradeep Kumar (NSS Programme Officer) frequently visited the camp, ensuring the safety and overseeing the effective implementation of camp activities. Dr. Sreelekha Nair (Consultant, SEC), Mr. Niyas M (Admin Assistant), and Mrs. Fousiya CK (Project Associate, SEC), alongside NSS Secretaries Mr. Jeffin Joy and Ms. Sreya K Raj, remained present throughout the camp, contributing to its successful completion.





NSS Best Male Camper

"The NSS camp was an incredible experience that provided an array of opportunities. From conducting household surveys to engaging in various cleaning activities, it instilled leadership qualities through teamwork, fostering new friendships along the way. The morning exercises were refreshing, and learning to cook brought a fresh experience. The skill development classes and different cultural activities added depth, all culminating in an unforgettable evening around the campfire. Overall, it was a transformative and enriching camp experience".

Aswin P

MSc in Computer Science with specialization in Data Analytics

Kerala University of Digital Sciences, Innovation and Technology
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NATIONAL SERVICE SCHEME
Unit 1 - Special Camp

"Not Me But You"

NSS Best Female Camper

"It was my first NSS camp experience. During my NSS camp, we bonded over ice-breaking activities and simple sports, quickly forming strong connections with diverse individuals. Engaging in community services, surveys, and cultural events, we discovered the joy of making a positive impact together. The shared experiences in basic accommodations fostered simplicity among us, creating lasting memories. As the seven days concluded, our friendship and bond increased, and our minds transformed with the power of unity and selfless service."

Shahana TK

(MSc in DATA ANALYTICS with specialization in BioAI)









NSS CAMP TESTIMONIAL FROM A NON-MALAYALI STUDENT



Harsh Vardhan

**MSc Computer Science with
Specialization in Machine
Intelligence
(SoCSE)**

"As we said goodbye to 2023 and welcome the arrival of 2024 at dawn, I am filled with gratitude for the amazing experience we had together throughout our NSS camp during the last week of 2023 in Mar Ivanios Bathany Vidyalaya in Athiyannoor. From being strangers at the start to weaving a tapestry of beautiful memories together, each moment spent with my fellow campers has left an indelible mark on my heart.

In the midst of diverse backgrounds and stories, we found a common thread that bound us as a family. The shared tasks that tested our teamwork, the quiet conversations under the starlit sky, laughter and dance around the campfire, and most importantly eating foods which we didn't like, every experience etched its place in the gallery of cherished memories.

As we step into the new year, my wish for each one of us is a tapestry of joy, success, and fulfilment. May our bonds grow stronger, our adventures more exciting, and our collective spirit continue to shine brightly.

Thank you for being a part of my journey, and here's to another year of friendship, growth, and countless memories waiting to be created together. I would love to cherish this friendship forever."

Happy Newyear 2024

Waterbody Mapping

The Social Engagement Centre and the Centre for GeoSpatial Technology organised a Water Resource survey in the Pothencode Panchayat. As part of this, eight MSc Data Analytics and Geoinformatics students undertook a comprehensive mapping and geo-tagging of a waterbody in the Manalakam Ward of Pothencode Panchayat. The survey, conducted on 02/12/2023, aimed to provide detailed insights into the local stream network.

The team, led by skilled students, utilized advanced tools such as the OpenStreetMapping, ODK Collect application, and OSM Tracker with the guidance of representatives of the Panchayat and Haritha Keralam Mission, enhancing the accuracy and efficiency of the mapping process. Ms.Nayana B, the ward member, accompanied the student team, providing invaluable local knowledge and



guidance throughout the survey. This collaborative effort emphasized the crucial role of community engagement in environmental initiatives. The water resource mapping in Manalakam Ward, enriched by the synergy between educational institutions and local governance, is poised to contribute significantly to the broader Neerthada Nadatham Program. The collected data, fortified by local insights, holds promise in fostering sustainable water management practices in the region.



Christmas Celebration

On the joyous evening of December 21, 2023 at Digital University Kerala (DUK) the Student Council orchestrated a vibrant Christmas celebration. The event kicked off at 4 pm, with the college brimmed in Christmas decorations, featuring an array of balloons, stars, and a captivating Christmas-themed photobooth.



The first activity of the evening was a star-making competition held at the Mess Hall. Participants brought their star materials and showcased their creativity by crafting some beautiful Christmas stars. Following the star-making competition, the much-anticipated Treasure Hunt commenced. The entire campus served as the turf for this exciting adventure, with five clues scattered strategically. All the teams displayed exceptional teamwork and perseverance in their hunt for clues and ultimately, one team was victorious.

The highlight of the evening was Santa's arrival, spreading cheer with carols and distributing sweets. A gathering of students in front of the Mess Hall welcomed Santa and Mr. Md Meraj Uddin, Chair of Students' Affairs of DUK, extended blissful Christmas wishes, and together with Santa, cut the Christmas cake. Following the cake-cutting, the winners of the star-making competition and the treasure hunt were honored with prizes. Christmas cakes were distributed to all students. The celebration continued with musical performances by talented students while the students enjoyed their cake.

As the daylight waned, the photobooth lit up with lights, providing the perfect backdrop for capturing Christmas memories. Students and faculty alike crowded at the booth, posing with Santa. The event came to a close with students dancing to festive tunes, singing carols, and enjoying the joyous celebration.



Annual Sports Meet 2023 - Prize Distribution Ceremony

The Prize Distribution Ceremony as part of the Annual Sports Meet 2023 held at Digital University Kerala (DUK) on December 13, 2023, marked the culmination of the Annual Sports Day, which took place on November 26. The event commenced at 5:30 pm in front of the campus, bringing together all students and faculties. The event was graced by the presence of esteemed dignitaries, including honorable Vice-Chancellor Prof. Saji Gopinath, Registrar Prof. Mujeeb A, Dean Development Prof. Asharaf S, Prof. KG Satheesh Kumar, Prof. Md. Meraj Uddin, Mr. R Murali, Dr. Gopakumar V, and Ms. Thusharakala ES.



This year saw a notable increase in sports participation among students, faculties, and working staff, with four student teams (Blue Buzzards, Green Falcons, Red OX, Yellow Raptors) and two faculty teams (Grey A and Grey B). Additionally, the inclusion of more game categories and athletic events contributed to the high participation.



The event commenced with impactful speeches highlighting the importance of sports participation alongside academic pursuits, delivered by Mr. Meraj Uddin and other distinguished guests. Following the speeches, Vice-Chancellor Mr. Saji Gopinath, along with the distinguished guests, bestowed medals and certificates upon the deserving winners across various sports categories. The acknowledgment of these achievements served to motivate and recognize the outstanding athletes within the DUK community.

The individual sports champion title for boys was awarded to Mr. Razin Haisam (MSc Data Analytics specialization in Computational Science). The individual champion title for girls was awarded to Ms. Anjali V (MSc Computer Science specialization in Cybersecurity). Team-wise, Yellow Raptors emerged as both the Games Overall Champions and Athletics Overall Champions, with Team Blue Buzzards securing the March Past winners. Ultimately, Yellow Raptors secured the Total Overall Champions Title, while Red OX claimed the 1st runner-up position. The ceremony reached its end at 6:30 pm, signifying the successful conclusion of the Annual Sports Meet 2023 at DUK.



March Past 1st blue buzzards



1st Runner up - Red ox



Individual Champion Girls



Individual Champion Boys

- Rajendran, B., Vidya, C. G., Sanil, J., & Asharaf, S. (2024). A Local Explainability Technique for Graph Neural Topic Models. *Human-Centric Intelligent Systems*, 1-24.
- Muraleedharan, V., Rajan, S. C., & R, Jaishanker. (2024). Geometric entropy of plant leaves: A measure of morphological complexity. *PLOS ONE*, 19(1): e0293596.
- Kurian, D., Hagberg, G. E., Scheffler, K., & Paul, J. S. (2023). A predictor-corrector phase unwrapping algorithm for temporally undersampled gradient-echo MRI. *Magnetic Resonance in Medicine*.
- Anjana Jimmington, Alfas Hakeem P, Preetam Mukherjee, Sabu M Thampi (2023), "A Novel Approach for Bridging the Gap Between SDN and MITRE for Agile Incident Response", 5th International Conference on Computing and Network Communications (CoCoNet'23), Bangalore, India.
- Dr. Sini V. Pillai, presented a paper at the POMS India International Conference 2023, hosted by the Production and Operations Management Society POMS India chapter at XLRI Jamshedpur from December 4th to 6th. The presentation, titled "Humanitarian and Crisis Management" delved into the complexities of electric vehicle incidents within the Indian context.
- Leena G Pillai, D. Muhammad Noorul Mubarak, and Elizabeth Sherly, "BiLSTM-CNN with Fixed Weight Approach for Tracking Speech Articulatory Features", Seventh International Symposium on Intelligent Systems Technologies and Applications (ISTA'23), Bengaluru, India on 18th - 20th December, 2023. The paper in the conference was presented by Leena G Pillai, Research Scientist, Centre for Excellence in Brain Computing, Digital University Kerala.



- Basil K Raju, Leena G Pillai, Kavya Manohar and Elizabeth Sherly, “Automatic Speech Recognition System for Malasar Language using Multilingual Transfer Learning”, 20th International Conference on Natural Language Processing (ICON-2023), Goa University, Goa, India on 14th - 17th December, 2023. The paper in the conference was presented by Basil K Raju, Intern, VRCLC, Digital University Kerala.



Book chapter by M.Sc Student: Sherin Maria Mathew (Msc.Ecology)

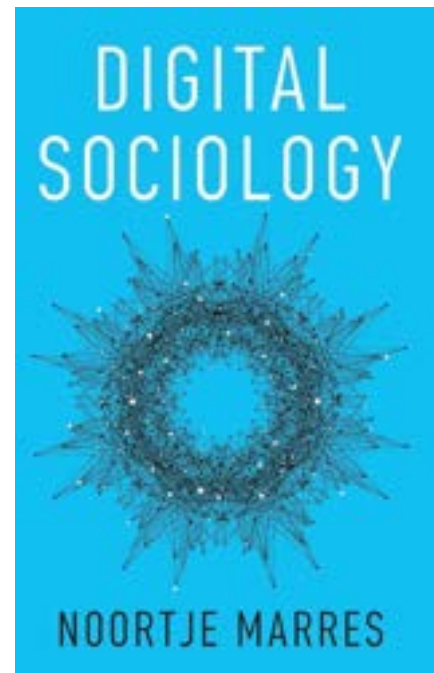
- V S, Faseela & Mathew, Sherin Maria & Saranya, Kotturu & Suthari, Sateesh & Asok, Smitha & Chintala, Sudhakar Reddy. (2023). From Field to Map: A Review of State-of-the-art Approaches to Estimate Above-Ground Biomass Integrating Remote Sensing Techniques.
- The research paper titled “EEG-based Imagined Word Recognition using CNN-Bi-GRU,” authored by Ms. Sabitha Rani and Dr. Elizabeth Sherly, has been accepted for presentation at the IEEE conference RAAI 2023. Ms. Sabitha Rani presented the paper at the 3rd International Conference on Robotics, Automation, and Artificial Intelligence (RAAI 2023) held at the prestigious National University of Singapore from December 14 to 16.



Book Review of the Month

Digital Sociology: The Reinvention of Social Research by Noortje Marres

The book -Digital Sociology is a new introduction to the field of digital sociology today at the interface of computing, media, social research and social life. The book claims to introduce key concepts, methods and understandings required to inform the development of digital forms of social enquiry. Marres, the author, proposes to assess the relevance and usefulness of digital methods, data, and techniques for the study of sociological phenomena and evaluate the major claim that computation makes a new way of knowing society possible.



Yes, the author argues convincingly that the digital does much more than inspire new techniques and inquiry methods in social research. More than innovation in that sense, it does force us to engage afresh with fundamental sociological questions. The social scientist must appreciate that the digital has thrown the existing knowledge frameworks into crisis. The book hints at the capacity of the digital to reconfigure more comprehensive relations not just in social research but in social lives as well.

The book's first chapter, 'What is digital sociology?', defines the title of her book and moves far beyond the definition and interpretation of it as an object, method and technique of inquiry. Marres, in her next chapter. "What makes digital technologies social?" moves on to consider what is social about digital technologies, and she proposes an answer to this question, which also focuses on interactions between social life and digital media technologies, specifically the ways in which digital infrastructures shape society. To her mind, this question of digital ways of knowing affects social research and social lives.

As the great 'influencer', social media also interacts with the digital to constitute the new 'social fact' (see Fish et al., 2011 for an interesting discussion). Reading George Herbert Mead helps here-orientating our behaviour towards/for others. Consider how you would talk if you knew someone was overhearing your conversation!

The third and fourth chapters are epistemological, ontological and methodological. One key and unavoidable element of the times of our lives now on earth is engagement with technology, especially digital technology. Everyone understands the increasing importance of computational science and related infrastructure in social life.

Much excitement and caution are in public space regarding that. These chapters deal with the transformation enabled by these factors and how the shorthand 'digital' engages itself with social life and research. The digital makes new ways of understanding society possible. The book definitely accepts that there will be challenges in new ways, too! But what we also have to contextualize while reading the book is the fact that the role of knowledge itself is changing in society.

"Can we know society in more responsive ways? Can we develop styles of social enquiry that takes advantage of the expanded interactivity between technology, people and non-human entities enabled by the digital?" (p. 164). She raises these questions in the fifth chapter, "Who are Digital Sociology's Publics?" What are the frameworks for digital social research? Ethical issues are important as well. The media is full of digital experiments with its audience, which sometimes raises questions about ethical boundaries.

The final chapter "Does digital sociology have problems?" deals with the question of whether we are concerned with digital transformations of knowledge structures alone. Marres suggests that the issues raised by digital ways of knowing and intervening in society are mostly framed too narrowly. Along with the author, the reviewer is also concerned that even in a digital platform, only well-recognized majority issues are represented and not so clear, less represented realities and vulnerabilities are not voiced. Similarly, do the questions of data misuse, data theft, privacy issues, and other common problems come under the purview of social science research or digital technology? We definitely need a social scientist to point out the effects of such practices.



Though the book talks about digital sociology, the entire discussion is applicable to other social sciences and humanities in different degrees. What is interesting about the book is the affirmation of the interdependence among disciplines and than the technology is no exception. The book's contribution lies in differentiating digital social research from a narrow understanding of social data computing. The author satisfactorily responds to the question whether we are learning technology in digital sociology/ humanities or whether it is about the social.

The book also deals with social media problems and how research practices and even media publications become an issue in the present digital era. It is covered well, and the good discussion interests a sociologist and could be the subject of another review. The reviewer shares the concern of the author whether we can find a way to accommodate and use the already existing abundant methodological resources with social sciences in the era of digital technology. In fact, we need significant research and studies in social science dealing with computational infrastructure and devices. Moreover, the role of data needs more scientific inquiry than we have at present.

And do you think the age-old question on data has lost its relevance? We still need to debate and discuss the use of data, what they should be used for and the questions of access to data. Along with other unsettling questions on digital social sciences and humanities, these classical questions remain- for us to debate and discuss. It also reminds us that the concept of the 'social' needs to be redefined. Marres upholds that sociologists need to investigate the interaction between knowledge, technologies, and social practices in what may be called digital societies. Can we agree that the digital is both the instrument and the object of analysis in digital social sciences and humanities? Are we on the same page that the digital is not about data, methods and techniques of enquiry alone? Overall, the book successfully delineates an intellectual agenda for those in the field.

Book Details: Noortje Marres (2017) Digital Sociology: The Reinvention of Social Research, Cambridge: Polity Press, 2016, £16.99 pbk (ISBN: 9780745684789), 240 pp.

References

Adam Fish , Luis F.R. Murillo , Lilly Nguyen , Aaron Panofsky apanofsky@socgen.ucla.edu & Christopher M. Kelty ckelty@ucla.edu (2011) BIRDS OF THE INTERNET, *Journal of Cultural Economy*, 4:2, 157-187, DOI: 10.1080/17530350.2011.563069



Dr.Sreelekha Nair

Consultant
Social Engagement Centre

Software of the month

Statistics Open For All (SOFA)

(<https://www.sofastatistics.com/downloads.php>)



SOFA (Statistics Open For All) is a cutting-edge software that caters to both beginners and experienced users in the field of data analysis. With its user interface and comprehensive features, it serves as a tool for a wide range of statistical analyses. At its core, SOFA is renowned for its simplicity and user-friendliness. The software offers an intuitive interface guiding users through the data analysis process without requiring statistical knowledge. This makes it particularly attractive to students, educators and professionals who need to perform analyses without dealing with software.



One of the features of SOFA is its support for various data formats. It can import data from sources like CSV, Excel Google Sheets and SQL databases. This flexibility ensures that users can work with data in their format streamlining the process of analyzing data. SOFA provides a range of tests and procedures, including descriptive statistics, t-tests, ANOVA, chi-square tests, and linear regression, among others. Explanations and interpretations accompany each analysis to help users comprehend and communicate their findings effectively.

The software also comes with a range of tools for visualizing data, which enables users to generate top-notch charts and graphs for their reports and presentations. Another notable benefit of SOFA is its dedication to open-source development. As an open source project, it continuously evolves thanks to the contributions from its user community.

Website of the month

ArXiv

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

This platform is widely used by scientists and researchers around the world to share and access the latest developments in their fields before they are formally published. The papers uploaded to arXiv are not peer-reviewed



by the site, but they often undergo peer review later when submitted to journals. ArXiv acts as a vital resource for researchers to stay up-to-date with the latest research, collaborate, and gather feedback on their work before official publication.

ArXiv.org plays a critical role in the scientific community, especially in fields like physics and mathematics, where the pace of research is very fast. Here are some key aspects of its operation and impact:



Open Access: One of the most significant features of arXiv is that it provides free access to a large volume of scientific papers. This open-access model facilitates the wide dissemination of scientific knowledge, making it accessible to researchers across the globe, regardless of their institution's ability to pay for journal subscriptions.

Rapid Dissemination: Since arXiv is not a peer-reviewed journal, researchers can upload their papers immediately after completion. This allows for rapid dissemination of new ideas and findings, which is crucial in fast-moving fields.

Community Screening: While arXiv does not conduct formal peer review, it does have moderation to ensure submissions are relevant and of a certain scientific standard. The community of researchers also informally critiques and comments on the work, providing a form of post-publication peer review.

Archiving Function: ArXiv serves as a permanent archive of scientific work. This is valuable for the long-term preservation of scientific knowledge and for providing a historical record of the development of ideas.

Precedence and Citation: Papers on arXiv can be cited in other works. Uploading to arXiv helps researchers establish precedence for their discoveries and ideas.

Impact on Publishing: The existence of arXiv has influenced the traditional scientific publishing model. It challenges the paywall approach of many journals and encourages more open-access policies.

Collaboration and Networking: By making early-stage research available, arXiv fosters collaboration among scientists. Researchers can discover others working on similar topics, potentially leading to collaborative projects.

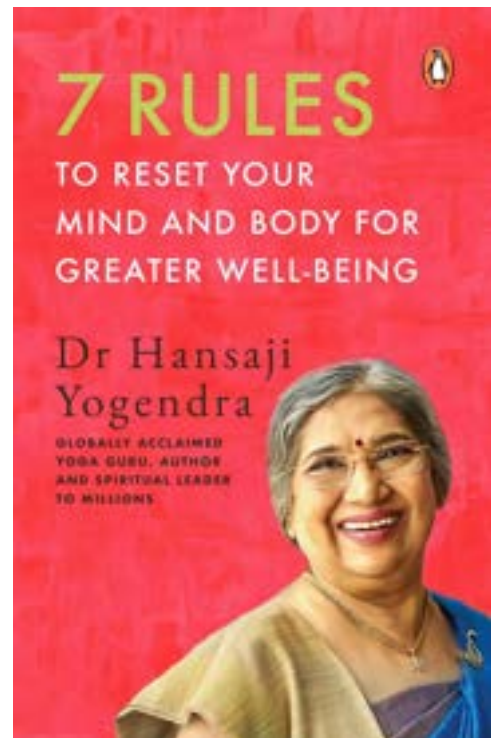
Diverse Disciplines: Initially focused on high-energy physics, arXiv has expanded to include other disciplines, demonstrating its adaptability and relevance to a broad range of scientific fields.

7 Rules to Reset Your Mind and Body for Greater Well-Being

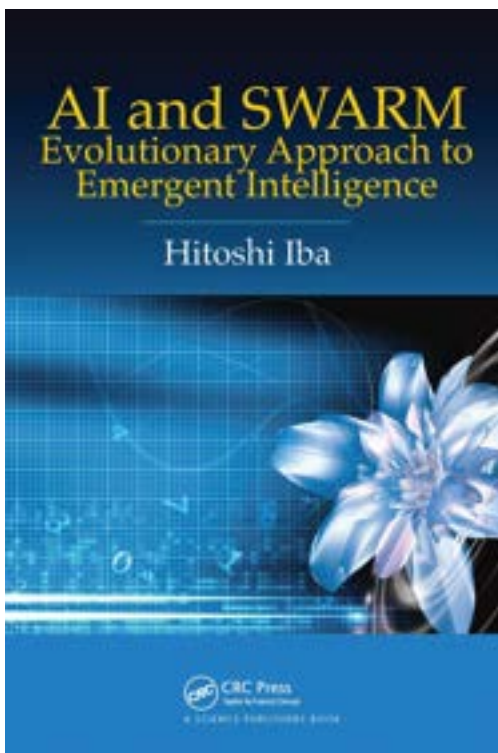
7 Rules to Reset Your Mind and Body for Greater Well-Being is the simple but practical guide you need to read to get that control back. Written by the most admired and respected Dr Hansaji Yogendra of The Yoga Institute, this step-by-step guide explains the importance of creating and maintaining balance in all aspects of your life. In an anecdotal and friendly way, Dr Hansaji delineates the practices and the thought processes you need to develop and the changes you need to make to put life in perspective for you. Whether it is getting a good night's sleep or eating healthy or dealing with the office stress, she helps you sort out each aspect with her great insight.

Source: Amazon

Yogendra, Hansaji (2023) 7 Rules to Reset Your Mind and Body for Greater Well-Being. India, Penguin Random House.



AI and SWARM Evolutionary Approach to Emergent Intelligence



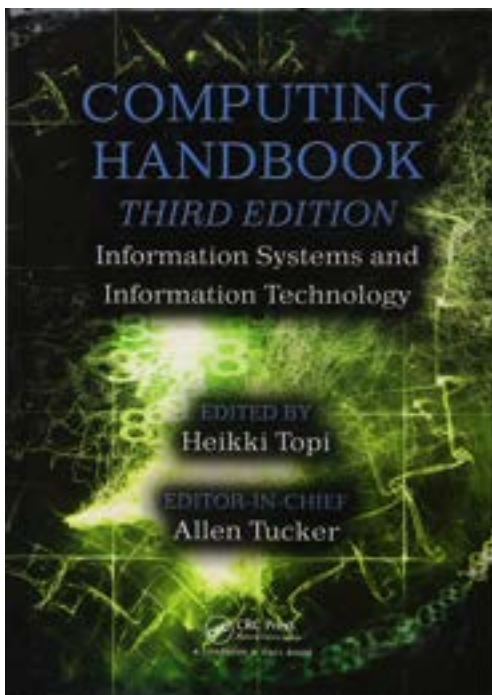
This book provides theoretical and practical knowledge on AI and swarm intelligence. It provides a methodology for EA (evolutionary algorithm)-based approach for complex adaptive systems with the integration of several meta-heuristics, e.g., ACO (Ant Colony Optimization), ABC (Artificial Bee Colony), and PSO (Particle Swarm Optimization), etc. These developments contribute towards better problem-solving methodologies in AI. The book also covers emerging uses of swarm intelligence in applications such as complex adaptive systems, reaction-diffusion computing, and diffusion-limited aggregation, etc.

Another emphasis is its real-world applications. We give empirical examples from real-world problems and show that the proposed approaches are successful when addressing tasks from such areas as swarm robotics, silicon traffics, image understanding, Voronoi diagrams, queuing theory, and slime intelligence, etc.

Source: Routledge

Iba, Hitoshi (2020) AI and SWARM Evolutionary Approach to Emergent Intelligence. Boca Raton, CRC Press.

Computing Handbook Information Systems and Information Technology



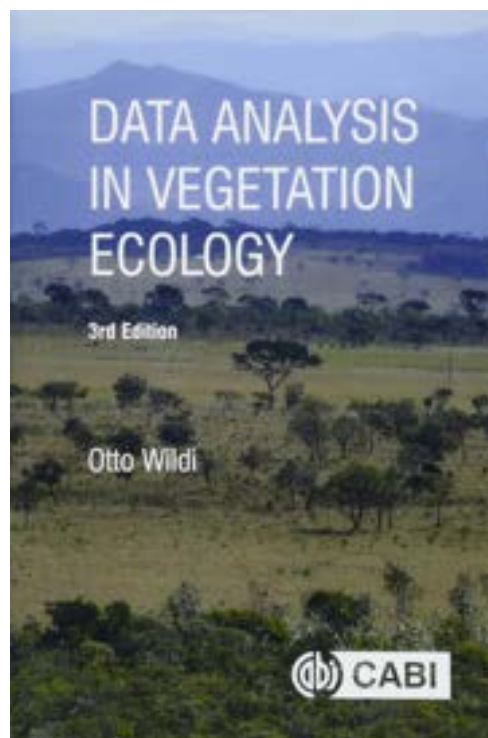
Computing Handbook, Third Edition: Information Systems and Information Technology demonstrates the richness and breadth of the IS and IT disciplines. The second volume of this popular handbook explores their close links to the practice of using, managing, and developing IT-based solutions to advance the goals of modern organizational environments. Established leading experts and influential young researchers present introductions to the current status and future directions of research and give in-depth perspectives on the contributions of academic research to the practice of IS and IT development, use, and management. Like the first volume, this second volume describes what occurs in research laboratories, educational institutions, and public and private organizations to advance the effective development and use of computers and computing in today's world.

Source: Routledge

Topi, Heikki - Tucker, Allen B (2014) *Computing Handbook Information Systems and Information Technology*. Boca Raton, CRC Press

Data Analysis in Vegetation Ecology

Evolving from years of teaching experience by one of the top experts in vegetation ecology, *Data Analysis in Vegetation Ecology* aims to explain the background and basics of mathematical (mainly multivariate) analysis of vegetation data. The book lays out the basic operations involved in the analysis, the underlying hypotheses, aims and points of views. It conveys the message that each step in the calculations has a specific, straightforward meaning and that patterns and processes known by ecologists often find their counterpart in mathematical operations and functions. The first chapters introduce the elementary concepts and operations and relate them to real-world phenomena and problems. Later chapters concentrate on combinations of methods to reveal surprising features in data sets. Showing how to find patterns in time series, how to generate simple dynamic models, how to reveal spatial patterns and related occurrence probability maps.



Source: Wiley Online Library

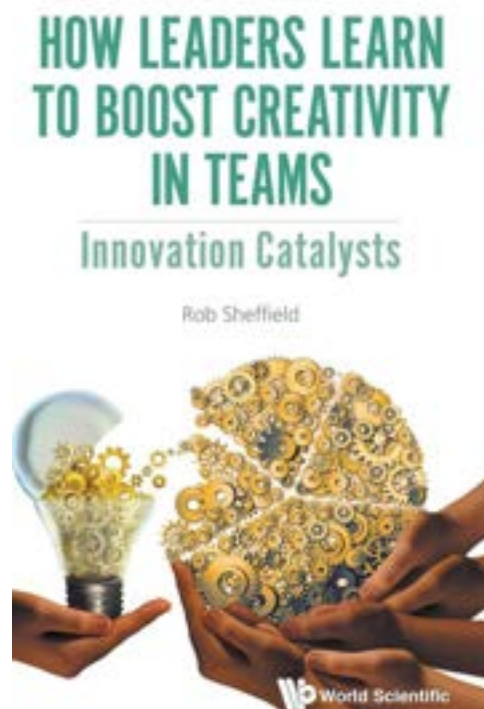
Wildi, Otto (2010) *Data Analysis in Vegetation Ecology*. Wiley-Blackwell, UK

How Leaders Learn to Boost Creativity in Teams: Innovation Catalysts

The book focuses on how leaders are learning to develop the creative capabilities of their team members and themselves. Through this learning, teams are developing original approaches to their work, benefitting their customers, patients, employees and other stakeholders. Using a strong interdisciplinary approach, *How Leaders Learn to Boost Creativity in Teams* introduces insights from the domains of psychology, creativity, leadership and power, and integrates these through a proposed framework for leading innovation. It contains nine in-depth, current-day cases of learning and workplace-based applications and has an optimistic message: creativity can be learnt. Making connections between current day research, learning and application in work contexts, it will appeal to leaders and students alike seeking to think outside of the box.

Source: Amazon

Sheffield, Rob (2020) *How Leaders Learn to Boost Creativity in Teams: Innovation Catalysts*. New Jersey, World Scientific.



6G: The Next Horizon: From Connected People and Things to Connected Intelligence

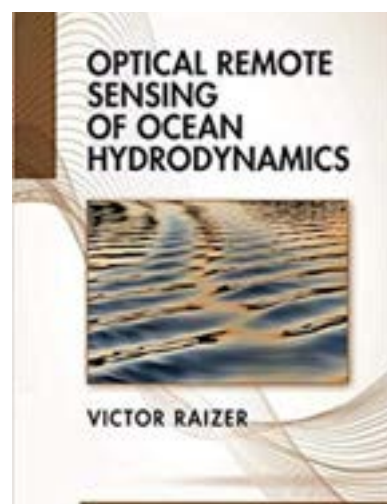
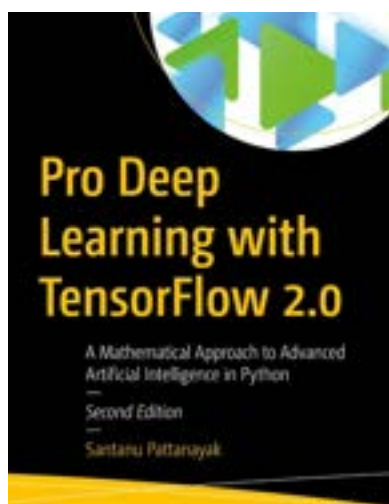
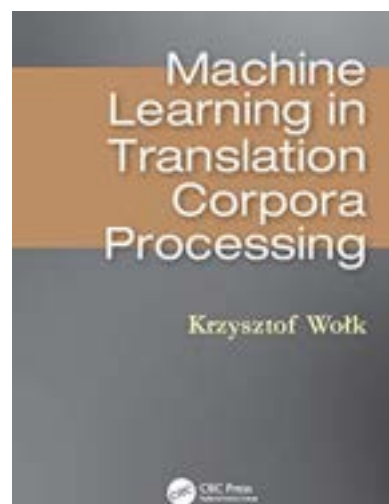
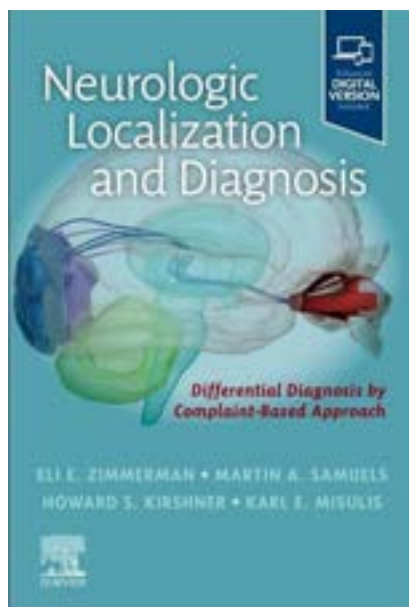
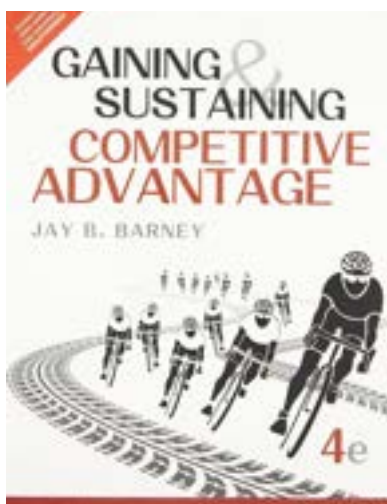
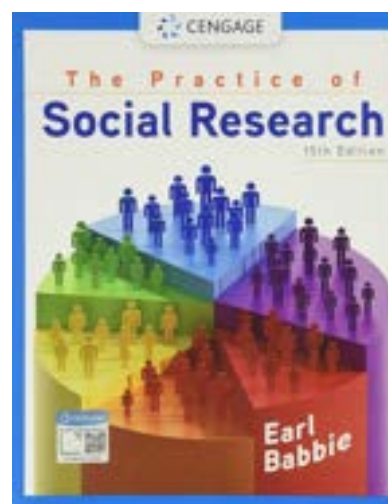
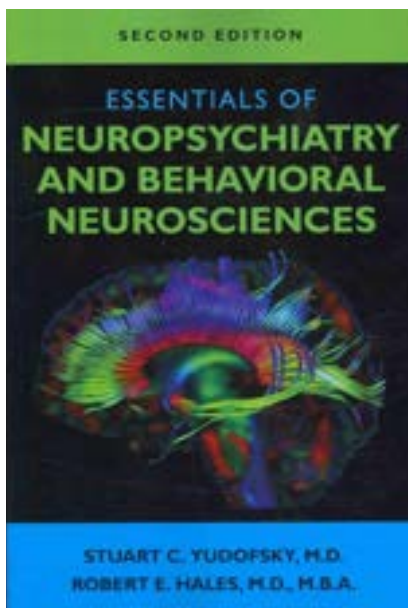
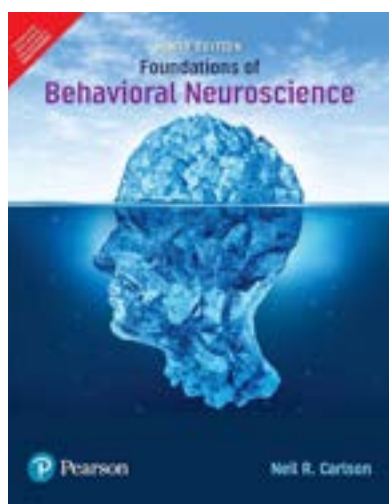


Source: Amazon

Tong, Wen - Zhu, Peiyong (2022) *6G: THE NEXT HORIZON: From Connected People and Things to Connected Intelligence*. : New York, Cambridge University Press.

The first book on 6G wireless presents an overall vision for 6G - an era of intelligence-of-everything - with drivers, key capabilities, use cases, KPIs, and the technology innovations that will shape it. These innovations include immersive human-centric communication, sensing, localization, and imaging, connected machine learning and networked AI, Industry 4.0 and beyond with connected intelligence, smart cities and life, and the satellite mega-constellation for 3D full-Earth wireless coverage. Also covered are new air-interface and networking technologies, integrated sensing and communications, and integrated terrestrial and non-terrestrial networks. In addition, novel network architectures to enable network AI, user centric networks, native trustworthiness are discussed. Essential reading for researchers in academia and industry working on B5G wireless communications.

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