



Chief Minister Pinarayi Vijayan Inaugurates Renovated IIIITM-K Building



20 24 NEWSLETTER

KERALA UNIVERSITY OF DIGITAL SCIENCES,
INNOVATION AND TECHNOLOGY

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ACHIEVEMENTS

Congratulations

Lakshmi Narayanan M Secures Eighth Position in AVISHKAAR 2024 National-Level 48-Hour Hackathon



LAKSHMI NARAYANAN M
(MSc Machine Intelligence (SoCSE)
of Digital University Kerala has secured
Eight position in AVISHKAAR 2024 - A
National Level 48 Hour Hackathon,
hosted by Aditya Institute of Technology
and Management, held from 27/02/2024
to 29/02/2024.



This Certificate of Appreciation is proudly presented to

LAKSHMI NARAYANAN

For being placed in the **Top 50 Teams**

In AI Arena 2.0

Siddhartha Gupta
CEO, Mercer | Mettl

A business of Marsh McLennan

welcome to brighter



DUK NEWS

Digital University Kerala celebrated its 3rd Foundation Day

Digital University Kerala celebrated its 3rd Foundation Day at C-DAC Hall, Technopark Campus, on 20 February. Padma Sri Sridhar Vembu, Founder and CEO of Zoho Corporation, graced the occasion. The event was presided over by Prof. Vijay Chandru, Chairman, Board of Governors, in the presence of our Honourable Vice Chancellor, Dr Saji Gopinath. On this occasion, we extend our heartfelt gratitude to our dedicated faculty, visionary leaders, enthusiastic students, and supportive community for making these three years a resounding success.



Chairman Distributes Certificates for Capacity Building Program in AI & DA

In a momentous occasion coinciding with the Foundation Day celebrations, Prof. Vijay Chandru, esteemed Chairman of the Board of Governors of Digital University Kerala, graced the Certificate Distribution Ceremony for the Capacity Building Program in Artificial Intelligence (AI) and Data Analytics (DA). The program, meticulously designed for the Economics and Statistics Department of the Government of Kerala, witnessed its culmination on February 20, 2024, at the CDAC hall in Technopark Phase I, Thiruvananthapuram.

The event commenced with a welcome address by Dr. Saji Gopinath, Vice-Chancellor DUK, followed by a presidential address from Dr. Vijaya Chandru, Chairman of the Board of Governors. The highlight of the event was the Foundation Day Lecture delivered by the renowned Padma Shri. Sridhar Vembu, Founder and CEO of Zoho. Dr. A. Mujeeb, Registrar of DUK, then delivered the vote of thanks.



Chief Minister Pinarayi Vijayan Inaugurates Renovated IIITM-K Building

On February 27, 2024, the renovated IIITM-K Building was officially inaugurated during a special event at the Mascot Hotel in Trivandrum. The ceremony featured the launch of several new programs and was graced by the presence of distinguished dignitaries, including the Hon'ble Chief Minister of Kerala, Shri. Pinarayi Vijayan, Hon'ble Finance Minister Shri. KN Balagopal, Hon'ble Minister for Industries Shri. P Rajeev, Hon'ble Higher Education Minister Smt. Dr. R. Bindu, Hon'ble Minister for SC/ST Welfare Shri. K.Radhakrishnan, and various esteemed MLAs.





Chief Minister Pinarayi Vijayan Inaugurates Renovated IIITM-K Building

Hon. Minister Smt. Dr. R. Bindu Released Compendium of Projects for Capacity Building in AI & DA Training Program

In a significant step towards fostering technological advancement and skill development for government employees, Smt. Dr. R. Bindu, the esteemed Minister for Higher Education & Social Justice, released the Compendium of Projects for Capacity Building in AI & DA Training program conducted by Digital University Kerala for the Economics and Statistics Department. The ceremony, held on February 27, 2024, at Mascot Hotel, Thiruvananthapuram, was a part of inauguration of the renovated IITMK building and the launch of several other programs.

During the ceremony, Smt. Dr. R. Bindu handed over the Compendium to Mr. Sreekumar B, Director of the Economics and Statistics Department. The event was attended by notable dignitaries including the Hon'ble Chief Minister, the Hon'ble Finance Minister, the Hon'ble Minister for Industries, the Hon'ble Minister for Higher Education, and the Hon'ble Minister for SC ST Welfare, as well as MLA's and Vice chancellors, who graced the occasion with their esteemed presence.



FRS of EARAS Module Developed by CDTI is Handed Over

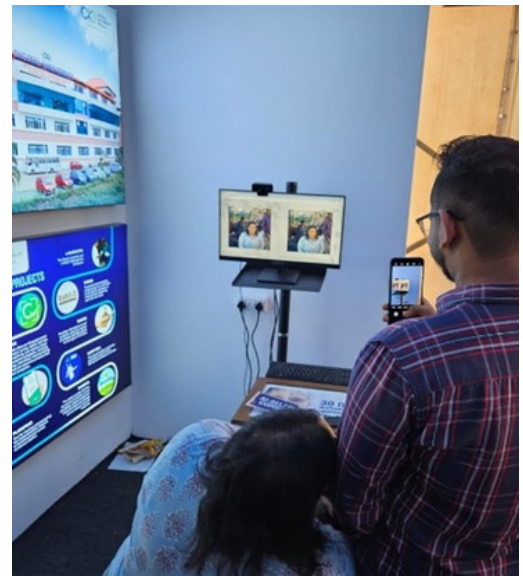
Shri. P. Rajeeve, Hon Minister for Law, Industries and Coir, Government of Kerala, Handed over the FRS of EARAS Module in AIDEA project to be developed by Centre for Digital Transformation and Innovation, Digital University Kerala, to Shri. B Sreekumar, Director of Department of Economics and Statistics, Government of Kerala, on February 27, 2024, at Mascot Hotel Trivandrum.



Global Science Festival Kerala

Global Science Festival Kerala (GSFK) was one of its first kind events organized by Govt. of Kerala between Jan 15 to Feb 15, 2024. Digital University Kerala was an important partner to the event and we displayed some of our best innovations in the GSFK meet during the one-month-long event. The event was inaugurated by Hon Vice Chancellor Prof (Dr) Saji Gopinath and the pavilion attracted over 20,000 visitors from various walks of life; Use of Blockchain technology for tracking coconuts; A digital journey through Kerala's heritage; Brain Computing interface; Showcase of various electronic sensor-based products, its making from materials; the Auto Blood transfusion innovation, the Graphene story; Fun with AI by showcasing the usage of AI technologies in predicting the self-image after many years; Cyber Defense demonstrations; DUK Course details, and showcase of DUKs various Projects were part of the DUK stall.





Global Science Festival Kerala (GSFK)

KSAAC Showcases Cyber Security Expertise @ GSKF 2024

The Global Science Festival Kerala (GSKF) 2024 was Asia's largest thematically curated science exhibition. It was a unique platform that aims to bring together scientists, artists, students and science enthusiasts worldwide to celebrate science. Our personal and professional lives revolve around digital platforms, making us all potential targets for cyber threats. Recognizing this, the Kerala Security Audit and Assurance Centre (KSAAC) team set up an interactive stall at the festival to educate attendees on safeguarding their digital lives. Our experts conducted live demonstrations, offering a rare glimpse into the techniques used in password attacks, phishing schemes, Wi-Fi hacking, and the intricacies of data recovery followed by illustrating countermeasures. These sessions were not only eye-openers but also served as a call to action for better personal cyber hygiene. The KSAAC team offered a free data recovery service throughout the festival. The recently established data recovery lab at KABANI has successfully retrieved data from approximately 52 individuals out of 56 from various pen drives and hard disks. This initiative was met with tremendous appreciation, highlighting the common yet often overlooked risk of data loss in our daily lives. We provided live demonstrations of phishing attacks and raised awareness about phishing links to several thousand audience members.



The KSAAC team received numerous inquiries about our cyber security training programs. Conducted brief seminars (~10 mins) for over 80 batches of school students at the nearby empty stall. Educational institutions, including many colleges and schools, expressed keen interest, registering for our upcoming Cyber Security Awareness Program. This enthusiastic reception underscores the growing awareness and need for cyber security education across all age groups. We received invitations from several organizations to conduct security auditing of their IT infrastructure and applications. The KSAAC team is planning to conduct complimentary health checkups for their infrastructure and applications.



KSAAC Showcases Cyber Security Expertise @ GSKF 2024

DUK PROGRAMS

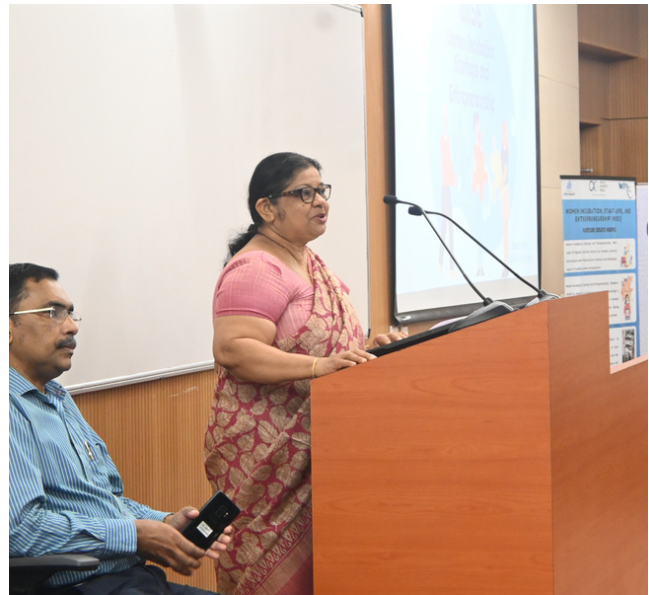
“Ventura” – Pitching Entrepreneurship through WISE

Women Incubation, Start-ups and Entrepreneurship (WISE) under the Digital University Kerala, a project headed by Dr. Elizabeth Sherly, is an Incubator providing innovation start-up space with infrastructural, financial and technological support to the budding dynamic women entrepreneurs. "VENTURA" event held at DUK on 28th February 2024, was a significant milestone for WISE.

Dr. Elizabeth Sherly, the Distinguished Professor at DUK, provided valuable insights into the objectives and methodologies regarding the WISE and WISE-S initiatives. Dr. Saji Gopinath, the honourable Vice Chancellor of DUK, during the ceremony, launched the WISE-S scheme, the extended services of WISE to the student aspirants for entrepreneurship. Mr. Ashok Panjikaran from Kerala Start Up Mission established the spirit of collaboration between KSUM and DUK on the WISE-S scheme. The Agreement Exchange for the new batch of WISE was facilitated by Dr. A. Mujeeb, the honourable Registrar of DUK.



Ms. Priya George, the Co-Founder of Sentient Scripts, shared the true story on her start-up's life that portrayed all the ups and downs of a woman's entrepreneurial journey. Ms. Shruthy Thankappan, the CEO of Lateral Minds Technologies Pvt Ltd and a proud WISE Incubatee, geared up the audience with the encouraging words on her entrepreneurial journey through WISE. The new WISE batch had an enriching experience, pitching the ideas of their respective startups at VENTURA.



“Ventura” - Pitching Entrepreneurship through WISE

National Science Day 2024

Digital University Kerala recently hosted a vibrant one-day National Science Day Celebration in association with KSCSTE on February 28th, 2024, centered around the theme "Indigenous Technologies for Viksit Bharat." The event aimed to ignite scientific curiosity and innovation among participants, ranging from students to seasoned researchers. The day began with a warm welcome address by Prof. (Dr.) A Mujeeb, Registrar, followed by an inauguration by Prof. (Dr.) Saji Gopinath, Vice Chancellor, emphasizing the pivotal role of indigenous technologies in shaping a sustainable future for India.

Featuring esteemed guest speakers Dr. E. Sreekumar, Director of IAV, Dr. Deepak Mishra, Professor at IISST, and Dr. Jerrin Thomas Panachekkal, Assistant Professor, College of Engineering Trivandrum, the celebration provided a platform for engaging thematic discussions. Dr. Sreekumar's address highlighted the significance of indigenous innovations, particularly in virology, stressing the importance of local expertise in addressing global health challenges. Followed by enlightening talks from Dr. Mishra and Dr. Panachekkal, the event not only celebrated scientific discovery but also fostered fruitful discussions, inspiring attendees to explore the potential of indigenous technologies in shaping a brighter future. The celebration, featuring stimulating activities like Quiz Competitions and Debates, successfully promoted scientific literacy, encouraged innovation, and facilitated meaningful networking opportunities, setting a strong foundation for future endeavors in science and technology.



Digital University Kerala Outreach Program

Digital University Kerala collaborated with Korambayil Ahammed Haji Memorial Unity Women’s College in Manjeri, Malappuram District, to host an outreach program on February 9th, 2024, themed "Embracing the Digital Future." The symposium featured talks by esteemed faculty members from Digital University Kerala's Schools of Informatics, Digital Science, and Digital Humanities and Liberal Arts. Dr. Sooraj N P, Dr. Aswin V S, and Dr. Shanujas V engaged final year undergraduate students across diverse disciplines, inspiring them to explore the transformative potential of digital technologies in shaping their future endeavors.



manjeri, Kerala, India
43HM+F37, Malappuram, Kerala 676517, India
Lat 11.129703°
Long 76.083422°
09/02/24 10:23 AM GMT +05:30



Python for Econometrics: A Five-Day Training Program at Digital University Kerala

The Center for Digital Transformation and Innovation at Digital University Kerala arranged a 5-day training session for PG students from the Economics Department at Nirmala College, Muvattupuzha, intending to prepare the future generation of economists for the digital age. The program spanned from January 22nd to 26th and equipped the students with the fundamental skills and knowledge needed to use digital tools and technology for economic analysis and research. Students gathered essential insights through a blend of theoretical understandings and real-world applications, knowledge that will surely help them in their academic and professional endeavors.



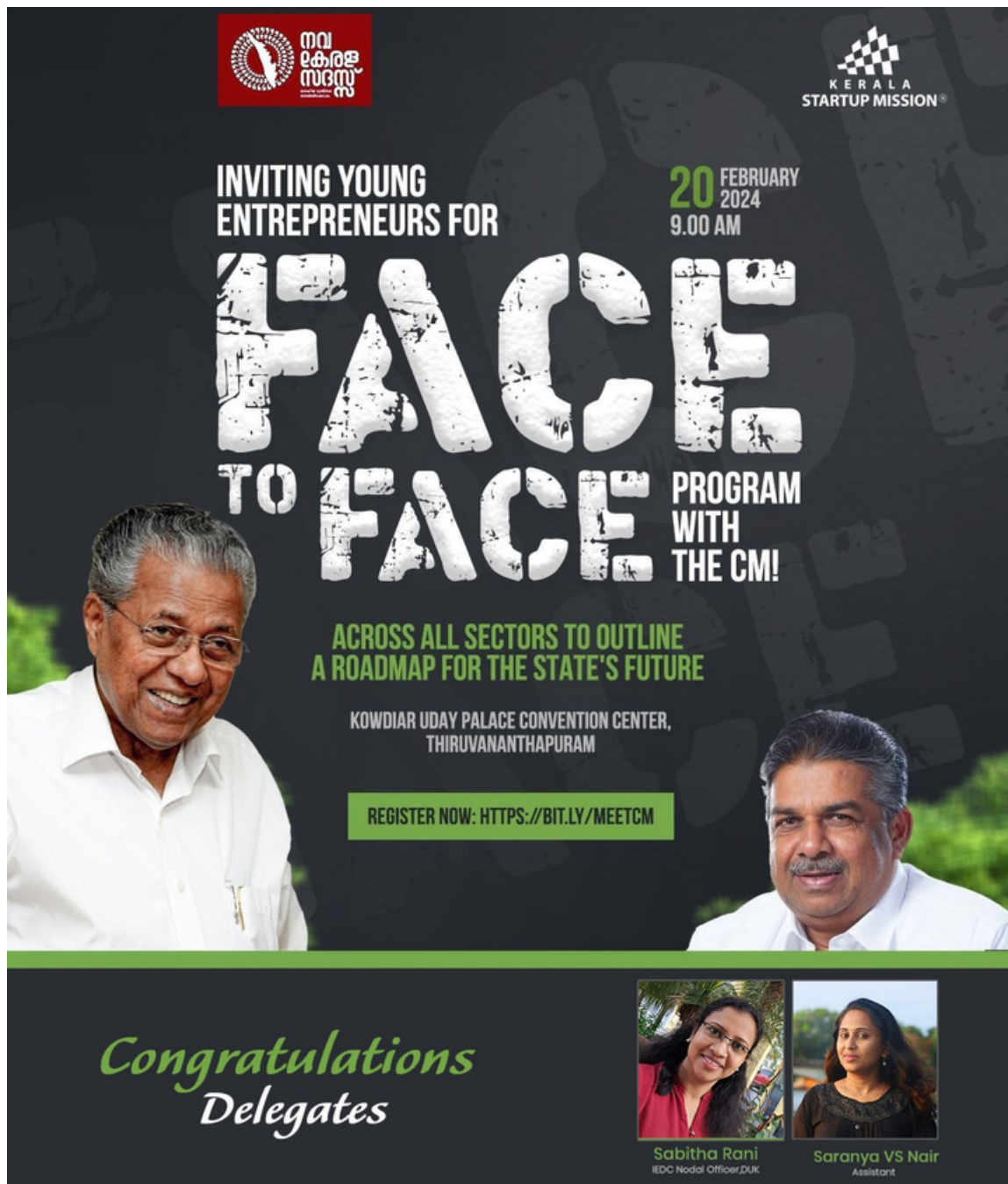
Digital University Kerala in collaboration with ASAP launches Postgraduate Diploma in International Finance, Public Accounting and Taxation

Digital University is Collaborating with the Additional Skill Acquisition Program (ASAP) in building a unique program to help BCom students achieve the minimum credit requirement and enable them to succeed in the Certified Public Accountant (CPA) exam. The Post Graduate Diploma Program is intended to provide job opportunities in the US market and Companies serving the US clients in India. To discuss the approach and way forward, Mr. Sean Muller, Senior Director, Surgent USA, visited the University on 19th February at 11:00 am. Members from ASAP and PrepQ (The training partner in India) accompanied Mr Muller. Hon Vice Chancellor Dr Saji Gopinath chaired the meeting. The Chair & faculty members of Digital Humanities and Liberal Arts participated. As an important takeaway, it was agreed that the course should be of extremely high value to the participating students.



FACE TO FACE program with CM

DUK is delighted to share the successful engagement of our representatives, Sabitha Rani B S and Saranya VS Nair, in the exclusive face-to-face session with the Chief Minister at the Kowdiar Uday Palace Convention Center in Thiruvananthapuram on 20th February 2024. The event provided a unique platform for direct engagement of youth, where our representatives actively contributed to discussions, expressing the concerns and aspirations of our youth community. The Chief Minister appreciated the diverse perspectives, fostering an inclusive dialogue that emphasized the crucial role of the youth in shaping the state's future.



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KERALA STARTUP MISSION

INVITING YOUNG ENTREPRENEURS FOR

20 FEBRUARY 2024
9.00 AM

FACE TO FACE PROGRAM WITH THE CM!

ACROSS ALL SECTORS TO OUTLINE A ROADMAP FOR THE STATE'S FUTURE

KOWDIAR UDAY PALACE CONVENTION CENTER, THIRUVANANTHAPURAM

REGISTER NOW: [HTTPS://BIT.LY/MEETCM](https://bit.ly/meetcm)

Congratulations Delegates

Sabitha Rani
IEDC Nodal Officer, DUK

Saranya VS Nair
Assistant

Three-Day Capacity Building Program for Officials from Government Secretariat held at IITMK Campus

The Centre for Continuing Studies (CCS) organized a successful three-day Capacity Building Program for selected Officers from the Government Secretariat from February 19 to March 2, 2024 at the Technopark Campus.

The program aimed to equip the participants with the latest knowledge and skills in e-Governance and Information and Communication Technologies (ICT) for improved government service delivery.

The program was conducted in three batches, providing intensive training on a wide range of topics relevant to e-governance and efficient administration. This comprehensive program provided the deputed officers with the necessary skillset and knowledge to navigate the ever-evolving technological landscape and contribute to a more efficient and citizen-centric government. The Training Program was coordinated by Shri. Jayachandran MB, Chief Technical Officer and his team including Prasanth Sasidharan, Rugma Raj, Rony P John and Shanu S.



Kerala Motor Vehicles Department Invests in Digital Skills with Six-Day Capacity Building Program

Kerala Motor Vehicles Department (MVD) recently concluded a successful six-day Capacity Building Program aimed at empowering its workforce with the latest digital tools and knowledge. Held at the Technopark Campus (IIITM-K) during January – February 2024, the program equipped a total of 60 participants from both Uniform and Administration staff with the skills to navigate the evolving landscape of e-governance. The training was coordinated by Shri. Jayachandran MB, Chief Technical Officer along with Prasanth Sasidharan, Rugma Raj and Rony P John. The Systems Team of the University provided technical support for the program. This team included Arun G (System Administrator) along with Sooraj RS, Saidali, and Shanu S from the Technical Support Team.



The program concluded with a successful evaluation test, and the top performer received a token of appreciation. The comprehensive approach and interactive format ensured positive feedback from participants. This initiative demonstrates the MVD's commitment to digital transformation and continuous improvement in serving Kerala's citizens.



Virtual IT Cadre Training for Government Officials Conducted

Digital University Kerala in association with The Kerala State IT Mission (KSITM) conducted a comprehensive 10-day residential training program titled "Virtual IT Cadre Training" for officers nominated from various government offices from February 26 to March 7, 2024. This intensive program aimed to equip these officers with the necessary skills and knowledge to become instrumental figures in the successful implementation of e-Governance projects within their departments.

The program culminated in a closing ceremony featuring Shri. Sanoob S, KAS, Head – Innovation, Research and e-Governance, as the invited special guest. Ms. Ambili. K, Mission Coordinator, e-Governance Programs also attended the concluding Session.



KERALA BLOCKCHAIN ACADEMY (KBA)

Conducted a session on “Blockchain & its applications in Agriculture” at ICAR–Central Tuber Crops Research Institute, Sreekariyam, Thiruvananthapuram

Kerala Blockchain Academy had delivered a session on Blockchain Technology & its use cases in Agriculture at ICAR-Central Tuber Crops Research Institute, Sreekariyam, Thiruvananthapuram on 08th February 2024 as part of their 5 day training program in Smart Farming Driven by Artificial Intelligence. Mr. Franklin John & Mr. Ananthan R, Research Scientists from Kerala Blockchain Academy delivered the session.



Conducted a session on Blockchain Technology as part of Science Day

In observance of Science Day celebrations, Kerala Blockchain Academy had delivered a session on Blockchain Technology "Decoding Blockchain" at GHSS Kulathur on 28th February 2024. The program was conducted in association with the Kerala State Council for Science, Technology and Environment (KSCSTE). 40 students from various schools & colleges attended the program.



Conducted a session “Decoding Blockchain and Web3” at Kerala Technology Expo

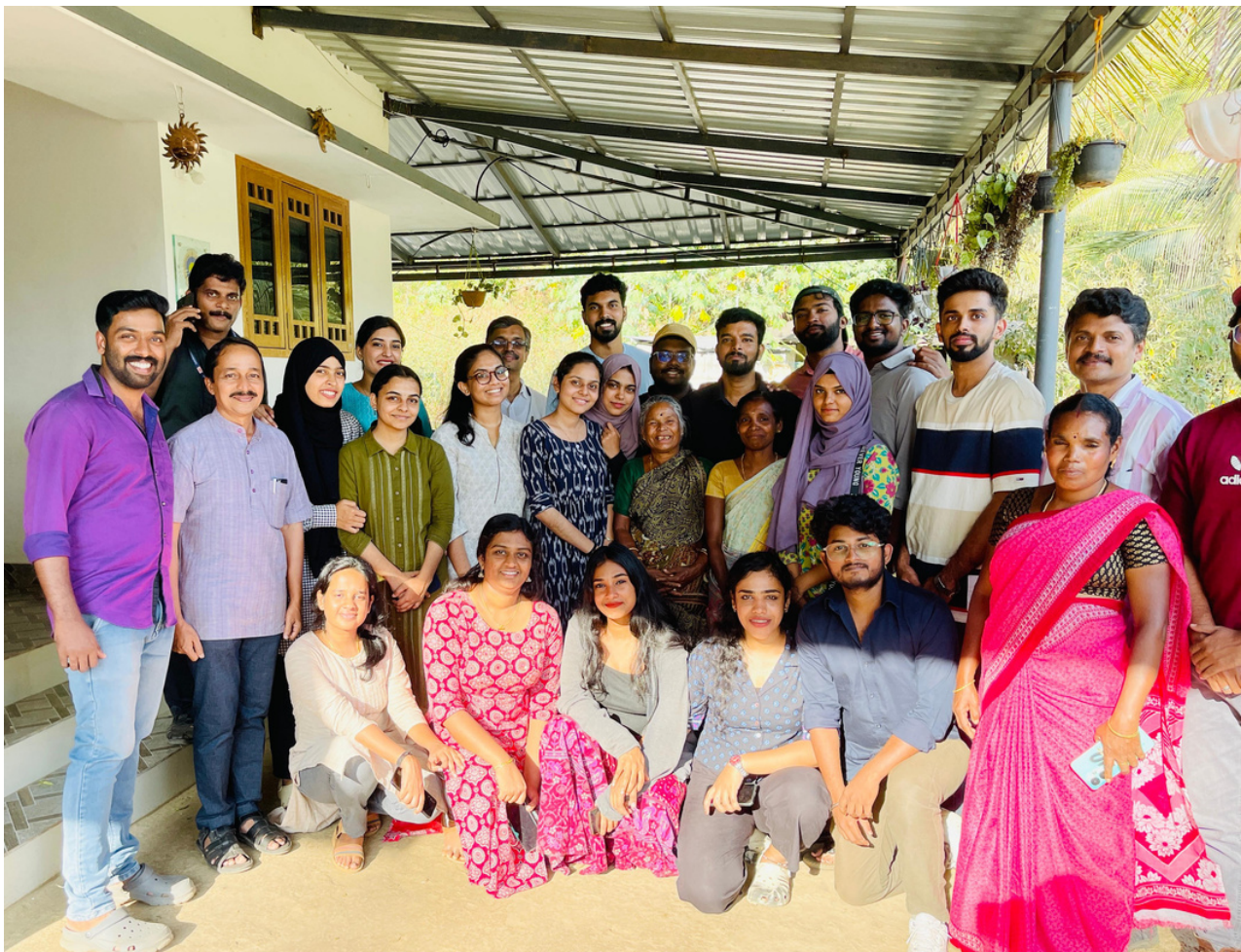
Kerala Blockchain Academy had delivered a session on Blockchain Technology at Kerala Technology Expo at Calicut on 29th February 2024. It was an engaging discussion that delved into the intricacies of Blockchain and Web3. 65 participants from various backgrounds like business professionals, Tech enthusiasts, students, Academicians etc attended the event.



Rural Immersion Program for MBA Students At Attappadi, Palakkad District, Kerala

The 3rd semester MBA students at the School of Digital Humanities and Liberal Arts recently embarked on a transformative journey through a rural immersion program as an integral component of their MBA curriculum. Conducted from February 12th to 17th, 2024, the program unfolded in the picturesque locales of Attappadi. Prof. Santhosh Kurup and Dr. Shanujas V, along with Mr. Baby Prabakar and Mr. Firoz from Blue Point, and Mr. Jishnu, Kudumbasree State Mission provided invaluable guidance and support throughout the immersive experience, accompanying the students as they delved into the rich cultural tapestry and socio-economic fabric of the region. Mr. Jomon and the team from the Kudumbasree unit, operating at KILA, Attappadi ensured seamless logistics and support throughout the program, joining the students from inception to conclusion. Immersed in various tribal hamlets, the students meticulously observed and analyzed the local lifestyle, culminating in the development of sustainable business models tailored to Attappadi's unique challenges. The students' comprehensive report, submitted to the Kerala Kudumbasree State Mission, underscores their commitment to contributing positively to rural development.





Adios Amigos – A Heartfelt Farewell to the Passing Out Batch of 2022-24

The Digital University Kerala bid adieu to its passing out batch of 2022-24 with a heartfelt farewell event titled "Adios Amigos". The event, organized and coordinated entirely by the first-year students, took place in front of the Mess Hall, which was adorned with warm lights and vibrant decorations, creating a nostalgic evening ambiance. The program commenced at 5:00 PM with some melodious songs performed by the students. The parking area was transformed into a photo gallery, displaying memorable moments of the second-year students, capturing the essence of their journey at DUK. Throughout the event, various activities such as spot games and tasks were conducted, fostering joy and laughter among the attendees. Notable staff members, including Prof. Md Meraj Uddin and Prof. KG Satheesh Kumar, graced the occasion and congratulated the graduating batch for their achievements and contributions to the college. They extended their blessings and well wishes for their future endeavors.



As dusk fell, the warm lights illuminated the surroundings, adding to the enchanting atmosphere. The second-year students were given opportunities to share their experiences and cherished memories of their time at DUK, evoking emotions of nostalgia. Meanwhile the attendees were treated to a refreshing "Mohabbat ka Sharbat" drink. A delectable dinner was served, followed by a cake-cutting ceremony to honor the second-year students. A heartwarming video, showcasing memorable moments of the passing out batch, was projected behind the stage, evoking many students to tears. As the evening progressed, lanterns were lit from the university ground, symbolizing a moving closure to the departing second-years. The event concluded with a photo session and the event came to a close around 10 pm.



DACE 2024**DIGITAL ACCESS FOR COMMUNITY EMPOWERMENT**

Digital University Kerala offers a compulsory course called Digital Access for Community Empowerment (DACE) to all postgraduate students. Its first part(DACE-1) has an intense 13-day programme that includes classroom lectures and workshops, field visits, group discussions, mentoring, and report writing. The University organised the course independently of other agencies for the first time this year through its Social Engagement Centre, paving the way for a continuous engagement with the communities visited by the students.

First year Post Graduate students of the four schools of the University- School of Computer Science and Engineering, School of Digital Sciences, School of Informatics and School of Digital Humanities and Liberal Arts- were divided into four batches, consisting of 45 students each. Each batch was further divided into teams of five students who were required to do assignments and field visits together. Attention was given that the teams consisted of students from different programmes and specialisations. They were exposed to different kinds of communities and various problems the latter faced.



Coastal and tribal communities, BUDS Rehabilitation Centres for mentally challenged people, day care centres for the elderly, Scheduled Caste colonies, Handloom units, Kudumbashree units and agricultural communities were visited by students as part of the first part of the DACE programme. As part of the DACE-1 course which is mentioned above, field visits were arranged in the DUK adopted villages as part of the Unnat Bharat Abhiyan and even beyond. Field Coordinators and Community Animators from within the communities assisted the students in their field visits.

The one-hour session by Prof. Saji Gopinath, the Honourable Vice Chancellor of DUK on the importance of the DACE course and technological advancement in community development not only served as a testament to the university's recognition and support for this unique course but also instilled a meticulous perspective in the minds of the participants on the course's value and relevance. His address was a wake up call to the technologists to be empathetic to the society around, apart from being theoretically sound.



DACE-1 aimed to introduce students to the basics of community with the help of the basics of social research methodology and perspective. They were given exposure to the processes and discourse on development and the functioning of local self government institutions by resource persons from the Social Engagement Centre and Kerala Institute of Local Administration, Thrissur. Sessions on Design Thinking and entrepreneurial skills were conducted by resource persons from the School of Digital Humanities and from external agencies.

Team presentations showcased the skills the students acquired as part of the teamwork until then and gathered comments from the panelists consisting of representatives of DUK faculty members, community, and industry. DACE-2 is expected to take forward the solutions found by the teams to the next level and find probably a small and yet sustainable solution to the problems existing in the communities the students visited.

DA CE 2024



MY EXPERIENCE WITH DACE PROGRAM

At the heart of Thiruvananthapuram, the Digital University Kerala has launched the Digital Access for Community Empowerment (DACE) program, a transformative initiative comprising theoretical content, field visits to the community, and assessments- both of team and individual participants. Spearheaded by the esteemed Dr. Saji Gopinath, Vice-Chancellor, and supported by Dr. Satheesh Kumar, Dr. Pradeep Kumar, and Dr. Sreelekha Rajagopalan Nair, DACE is dedicated to bridging the gap between students and communities, offering digital solutions to enhance their quality of life.



SAI SHANKAR G NAIR

DACE Batch 4 Team 7
Msc Ecology With
Specialization in
Ecological Informatics

Our journey with DACE led us to the picturesque Vizhinjam Coastal area, where Group 7 of Batch 4 delved into the lives of the local fishing community. Aided by insightful classes from Mr. Vinod Damodaran, Dr. Peter M.Raj from KILA, Dr. Pradeep Kumar K. School of Digital Humanities and Liberal Arts, Dr. Sreelekha Nair, Social Engagement Centre, Ms. Fousiya C.K., Social Engagement Centre, and collaboration with Panchayat officials, we engaged in a practical learning experience. From transect walk through the community dwelling to understanding fisherfolk's situations through meetings with Key Informants, the community welcomed us with open arms, showcasing their support, friendliness, and eagerness to work together.

Identifying key challenges faced by the fishing community, including inadequate facilities and environmental concerns, we proposed an innovative solution. Our system integrates GPS, HAM radio, multimedia modules, and various sensors to enhance real-time tracking, communication, and data collection. This comprehensive approach aims to improve the safety and security of fishermen, addressing their unique needs. By collaborating with officials from marine police, fisheries department, marine rescue, and the Indian Coast Guard in Vizhinjam, our collective efforts are making waves in empowering communities through digital innovation. We as a team are excited that we may be able to make a meaningful impact in the lives of the community members whom we visited as part of DACE.

MY EXPERIENCE WITH DACE PROGRAM



Annapurna Padmanabhan

DACE Batch 4 Team 8

M.Sc. in Computer
Science Specialization
in Data Analytics

The Digital Access for Community Empowerment (DACE) programme, as the name suggests, aims at harnessing the digital and technological knowledge of the youth into developing solutions to the problems faced by different communities. When I first heard that I was going to be part of such a programme, I had so many doubts in my mind. I was skeptical about how I was going to interact with the people and most importantly, how would I find solutions to the problems they face.

During the first four days, we were introduced to the various social aspects with which we were expected to approach the people and our problem-solving process. On the fifth day of the programme, we visited the handloom community at Bhagavathinada. We were welcomed with open arms by the members of the handloom community and they readily shared their thoughts and concerns with us. For the next few days, we got to spend time with them, closely analyzing their lives and trying to find ways with which we can help them.

It was an amazing experience. It really changed me as a person. It helped me converse better with people, made me realize that there are pressing issues that people around us face in their lives. This experience taught me a lot about my responsibilities to the people, as a young citizen. We sometimes see the knowledge we gain simply as a medium to get a good job. What we fail to realize is that the knowledge we gain is not just meant to help bag a high-paying job. It is also meant to be used as a tool to help the people around us. Before visiting the handloom community as part of DACE, I never imagined that I too can use my knowledge to help the people belonging to the handloom industry. It is when you go beyond the boundaries that you see opportunities.....ones that help you to be the “change” that you wish to see in the nation.

While saying this, I convey my heartfelt gratitude to each and every member of DUK guiding team, who was part of this programme for having given us this beautiful experience, which we will cherish throughout our lives. As we bid farewell to the first phase of DACE and move on to the next, I take with me, the lessons learnt from all the enlightening experiences I had during this programme.



HOW THE DACE EXPERIENCE TRANSFORMED ME

As I sit down to write about my DACE experience, I feel grateful to our university for arranging an initiative like this. My experience with the Digital Access for Community Engagement (DACE) program has been enlightening. As a student from DUK, stepping into the vibrant community of Vizhinjam as part of the first batch of DACE-2024 was quite exciting. Since the beginning, we had a clear mission: to use technology, digital knowledge, and our lessons to address the societal issues present in the Vizhinjam fishermen community.



Sourudra Nag

DACE Batch 1 Team 6
M.Sc. in Computer
Science Specialization
in Data Analytics



The warmth and hospitality of the people in Vizhinjam left a deep mark in my heart. While interacting with the people, we quickly recognized a significant challenge: the lack of awareness and access to higher education and career opportunities in the community.

Working alongside my team, composed of people from different parts of India, I learned the actual value of collaboration and diversity. Despite our varied backgrounds, we united with a shared purpose, utilizing our collective expertise to find a solution for the issue that we have recognized. The community needed to discover more opportunities beyond their immediate surroundings.

Engaging with the community gave me invaluable insights into social work, empathy, and problem identification. Even though I lacked a social science background, I embraced social science lessons and design thinking principles taught in the DACE classroom to tackle the problems thoroughly.



My experience in Vizhinjam also gave me a deeper understanding of Kerala's socio-economic structure and the intricate role that religious beliefs play in shaping the community. While sitting in their homes and engaging in heartfelt conversations, I developed a deep appreciation for the resilience and spirit of the people.

My time in Vizhinjam with the DACE programme has been nothing short of transformative. It has equipped me with technical skills and instilled a sense of empathy, cultural understanding, and a commitment to drive positive change in society.



SOCIAL ENGAGEMENT CENTRE

Water Resource Management in Pothencode Panchayat

The integrated water resource management in Pothencode Panchayat has come a long way. Multiple meetings have been conducted to ensure the project is progressing in the right direction. Two meetings were held in February.

Reviewing the current water resources map and intervention methods

On February 2, 2024, the MGNREGA engineering team visited the DUK campus and revisited the neerurav document, which comprises existing water resource maps and intervention strategies to improve water resources in the Pothencode panchayat. The team reviewed the neerurav document and water resource maps, identifying areas requiring immediate attention.



Follow-up meeting – Water Resource Mapping

On February 26, 2024, the Pothencode Panchayat hosted a stakeholder meeting to present the results of the water mapping done by the Centre for Geospatial Technology, School of Digital Sciences, DUK in collaboration with the Haritha Keralam Mission. Pothencode Panchayat members, representatives of Haritha Keralam Mission, MGNREGA, Department of Minor Irrigation and so on took part in the meeting. Haritha Keralam Mission presented the findings of the water resource mapping, leading to discussions within the team regarding the current status of existing interventions and their effectiveness in managing water resources in Pothencode Panchayat. DUK was represented by the Social Engagement Centre. A decision was taken that Social Engagement Centre, DUK will host the workshop on Water Budgeting for Pothencode Panchayat as part of its community engagement activities in adopted villages.



PUBLICATIONS

- Kumar, S., Datta, S., Singh, V., Singh, S. K., & Sharma, R. (2024). Opportunities and Challenges in Data-Centric AI. *IEEE Access*. 10.1109/ACCESS.2024.3369417.
- Anoop, V. S., Krishna, C. S., & Govindarajan, U. H. (2024). Graph embedding approaches for social media sentiment analysis with model explanation. *International Journal of Information Management Data Insights*, 4(1), 100221. <https://doi.org/10.1016/j.jjime.2024.100221>
- Iyer, R. T., & Krishnan, M. T. (2024). Spatial prediction of soil micronutrients using supervised self-organizing maps. *Journal of Agriculture and Food Research*, 101033. <https://doi.org/10.1016/j.jafr.2024.101033>.
- Ragendhu S P, Tony Thomas, Sabu Emmanuel (2024). Cancelable Biometric Template Generation Using Random Feature Vector Transformations, *IEEE Access*, DOI: 10.1109/ACCESS.2024.3366456.
- Suresh, I., Vialard, J., Izumo, T., & Lengaigne, M. (2024). Role of intersecting equatorial and coastal waveguides near Sri Lanka on intraseasonal sea level variability along the west coast of India. *Journal of Geophysical Research: Oceans*, 129, e2023JC020198. <https://doi.org/10.1029/2023JC020198> (Q1).
- Sadhvi, K., Suresh, I., Lengaigne, M., Izumo, T., Penduff, T., Molines, J.-M., et al. (2024). Intrinsic versus wind-forced Great Whirl non-seasonal variability. *Journal of Geophysical Research: Oceans*, 129, e2023JC020077. <https://doi.org/10.1029/2023JC020077> (Q1)
- Jaishanker, R., Athira, K. (2024). Ecological informatics: Metamorphosing ecology to a translational discipline. *Ecological Informatics*, <https://doi.org/10.1016/j.ecoinf.2024.102525> (Q1) .

CONFERENCE PAPER PRESENTATION

Dr. Shanujas V. presented a paper at the 9th PAN IIM World Management Conference held at IIM Sambalpur on the theme "Entrepreneurial Innovation and Digital Governance for Inclusive and Sustainable Growth" from 22nd to 24th January 2024. The presentation, titled "Strategic Job Competency Prioritization for Elevated Customer Satisfaction: An ANP Framework"

Congratulations

Ms. Kavya Manohar, Computational Linguist at The Virtual Resource Centre for Language Computing project of DUK was awarded doctoral degree by APJ Abdul Kalam Technological University. Her research was on 'Linguistic challenges in Malayalam speech recognition: Analysis and Solutions' carried out at College of Engineering Trivandrum.

Kavya's research works can be accessed at kavyamanohar.com



BOOK CHAPTER

Balasubramaniam, S., Prasanth, A., Kumar, K. S., & Kavitha, V. (2024). Medical Image Analysis Based on Deep Learning Approach for Early Diagnosis of Diseases. In *Deep Learning for Smart Healthcare*, 1st Edition, 2024, CRC Press, Taylor and Francis, Pages : 22, eBook ISBN : 9781003469605.
 DOI : <http://dx.doi.org/10.1201/9781003469605-4>



DEEP LEARNING FOR SMART HEALTHCARE

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Chapter

Medical Image Analysis Based on Deep Learning Approach for Early Diagnosis of Diseases

By *S. Balasubramaniam, A. Prasanth, K. Sathesh Kumar, V. Kavitha*

Book [Deep Learning for Smart Healthcare](#)

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First Published	2024
Imprint	Auerbach Publications
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INVITED TALK

- Dr. Anoop V. S. delivered a session on "Research Foundations of Data Science and Tools and Technologies for Data Science Research" as part of a three-day faculty development workshop on "Research Foundations and Perspectives of Data Science and Deep Learning" organized by the Department of Computer Science and Engineering, Vidya Academy of Science and Technology, in association with ISTE, on 13th February 2024.
- Dr. Anoop V. S. served as a Project Evaluator as part of the Winter School on "Natural Language Processing and Large Language Models" conducted by the International Centre for Free and Open Source Solutions (ICFOSS), Government of Kerala, on 09th February 2024.
- Dr. Shamjid P gave an invited lecture titled 'Computational Insights into Plasmonic Nanostructures for Polymer Solar Cells' at the International Conference on Theoretical & Experimental Physics (ICTEP 2024) hosted by Farook College (Autonomous), Kozhikode on 20th February 2024. <https://drive.google.com/openid=1NweBKT6OD6DUDKdKylrzQm9FGvAUjRhG>
- Dr. Sinnu Susan Thomas delivered a talk on Science of Decision Making at College of Engineering, Thiruvananthapuram on 6th February 2024.

CONFERENCE ON ML4MS 2024

Dr. Manoj Kumar T K conducted conference on Machine Learning for Molecular Sciences (ML4MS 2024) from February 1st to 3rd, 2024 Gokulam Grand in Thiruvananthapuram.

The focal point of ML4MS 2024 was the exploration of cutting-edge applications of machine learning techniques within the broader landscape of molecular sciences. The conference had extensive programme of talks, hackathons, flash talks and presentations that illuminated the transformative impact of these approaches in a variety of molecular research domains. At the heart of the conference lay many topics, including identification of novel drug leads using machine learning, AI based material design, and application of AI in biosciences.



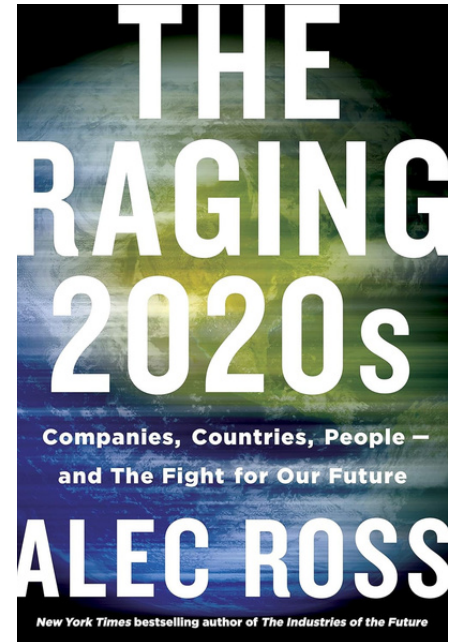
EXPLORE THE LATEST KNOWLEDGE CENTRE COLLECTIONS

The Raging 2020s: Companies, Countries, People And The Fight For Our Future

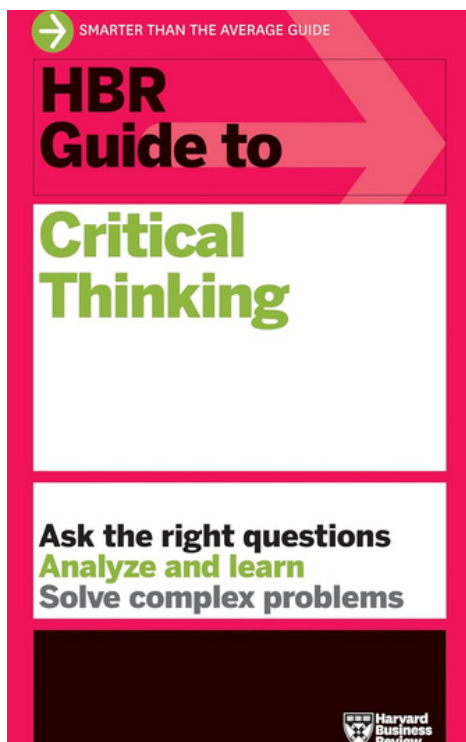
In the face of unprecedented global change, New York Times bestselling author Alec Ross proposes a new social contract to restore the balance of power between government, citizens, and business in *The Raging 2020s*. For 150 years, there has been a contract. Companies hold the power to shape our daily lives. The state holds the power to make them fall in line. And the people hold the power to choose their leaders. But now, this balance has shaken loose. As the market consolidates, the lines between big business and the halls of Congress have become razor-thin. Private companies have become as powerful as countries. As Walter Isaacson said about Alec Ross's first book, *The Industries of the Future*, "The future is already hitting us, and Ross shows how it can be exciting rather than frightening." Through interviews with the world's most influential thinkers and stories of corporate activism and malfeasance, government failure

Source: Amazon

Ross, Alec (2022) *The Raging 2020s: companies, countries, people and the fight for our future*. London, Transworld Publishers



HBR Guide To Critical Thinking



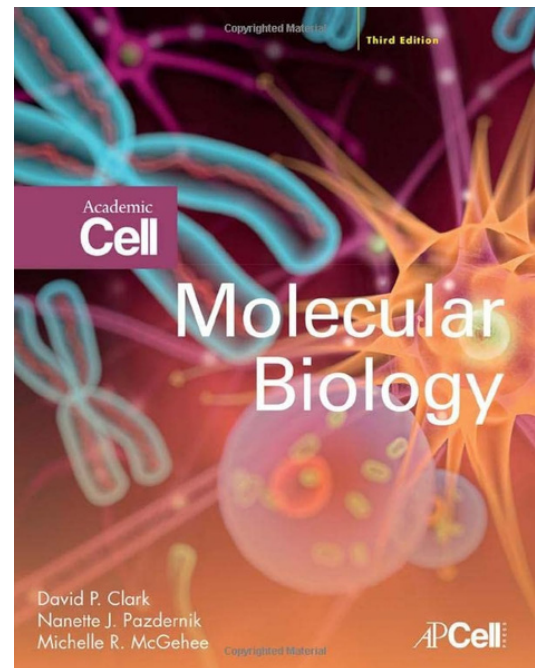
Tackle complex situations with critical thinking. You're facing a problem at work. There are many ways you can approach the situation, but each comes with its own pros and cons. How do you sort through all the information so that you know you're taking the right path? The answer is in how you think. The "HBR Guide to Critical Thinking" will help you navigate your most challenging issues, from difficult problems to tough decisions to complex scenarios. By carefully observing the situation, gathering information, inviting other perspectives, and analyzing what's in front of you, you can move forward with confidence while building this crucial leadership skill. You'll learn how to: Question your assumptions; Keep an open mind to opposing viewpoints; Sidestep cognitive biases; Use data--when appropriate; Grow comfortable with ambiguity; Find innovative and creative solutions. Arm yourself with the advice you need to succeed on the job, with the most trusted brand in business. Packed with how-to essentials from leading experts, the HBR Guides provide smart answers to your most pressing work challenges.

Source: Harvard Business Publishing Education

Harvard Business Review (2023) *HBR guide to critical thinking*. Boston, Harvard Business Review Press

Molecular Biology

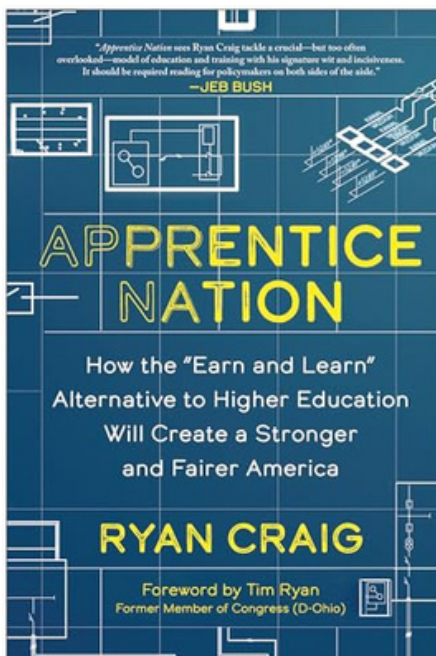
Molecular Biology, Third Edition, provides a thoroughly revised, invaluable resource for college and university students in the life sciences, medicine and related fields. This esteemed text continues to meet the needs of students and professors by offering new chapters on RNA, genome defense, and epigenetics, along with expanded coverage of RNAi, CRISPR, and more ensuring topical content for a new class of students. This volume effectively introduces basic concepts that are followed by more specific applications as the text evolves. Moreover, as part of the Academic Cell line of textbooks, this book contains research passages that shine a spotlight on current experimental work reported in Cell Press articles. These articles form the basis of case studies found in the associated online study guide that is designed to tie current topics to the scientific community.



Source: Amazon

Clark, David P | Pazdernik, Nanette J | McGehee, Michelle R (2019) MolecularBiology.UK, Academic Press

Apprentice Nation : How he "Earn And Learn" Alternative To Higher Education Will Create A Stronger And Fairer America



College isn't for everyone. It's time to challenge the status quo and embrace the potential of apprenticeships in tech, healthcare, finance, and more which can provide a sustainable pathway to economic opportunity. For decades, college has been the only respectable way to access the world of work, despite paralyzing tuition and a dire lack of practical skills that has left 40 percent of college graduates underemployed, unfulfilled, and struggling to repay student loan debt. Education and workforce expert Ryan Craig explores how a modern apprenticeship system will allow students and job seekers to jump-start their careers by learning while they earn ultimately leading to greater workforce diversity and geographic mobility.

Source: Penguin Random House

Craig, Ryan (2023) Apprentice nation : how the "earn and learn" alternative to higher education will create a stronger and fairer America. Dallas, Benbella

Remote Sensing Physics : An Introduction To Observing Earth From Space

An introduction to the physical principles underlying Earth remote sensing.

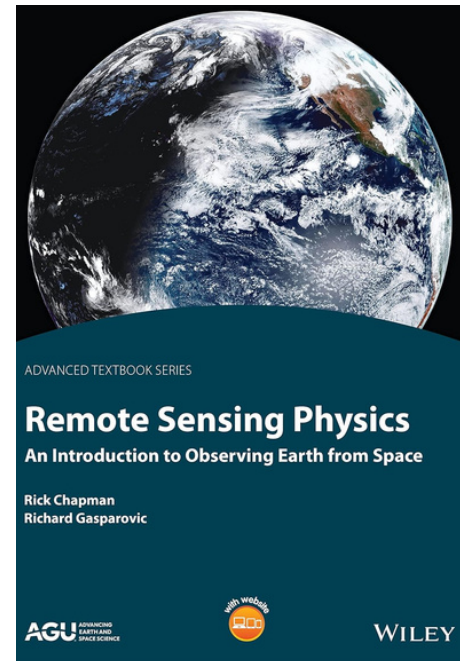
The development of spaceborne remote sensing technology has led to a new understanding of the complexity of our planet by allowing us to observe Earth and its environments on spatial and temporal scales that are unavailable to terrestrial sensors.

Remote Sensing Physics: An Introduction to Observing Earth from Space is a graduate-level text that examines the underlying physical principles and techniques used to make remote measurements, along with the algorithms used to extract geophysical information from those measurements.

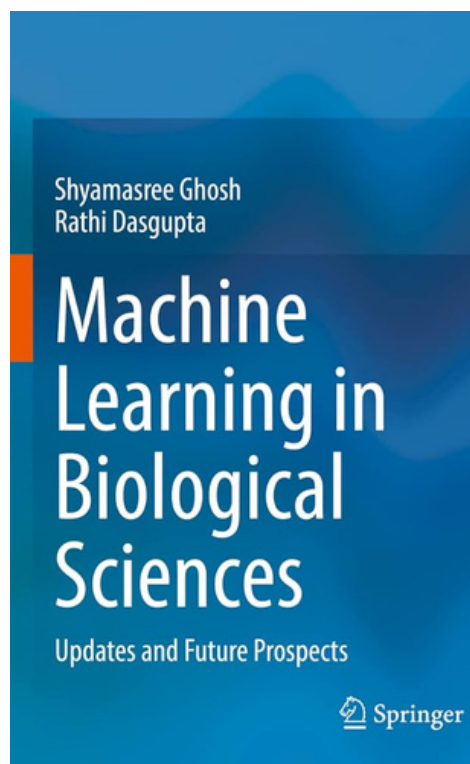
Source: Amazon

Chapman,Rick | Gasparovic, Richard(2022) Remote sensing physics : an introduction to observing earth from space.

USA, Wiley



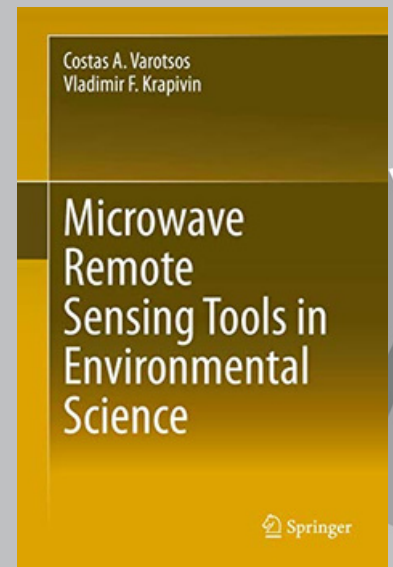
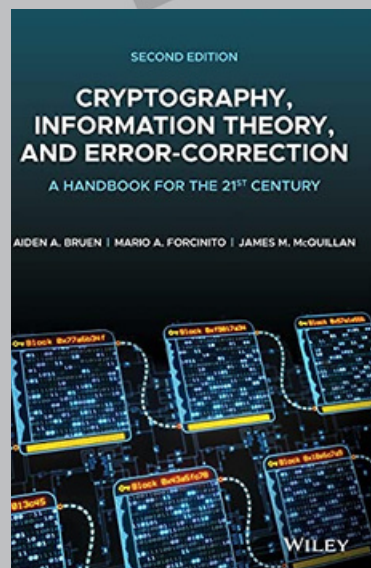
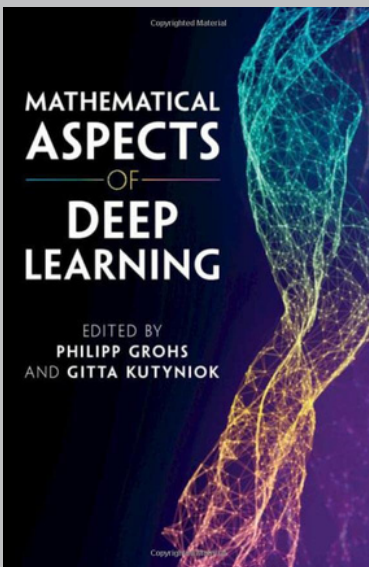
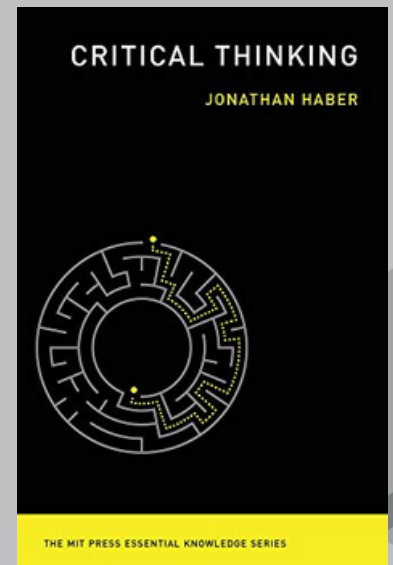
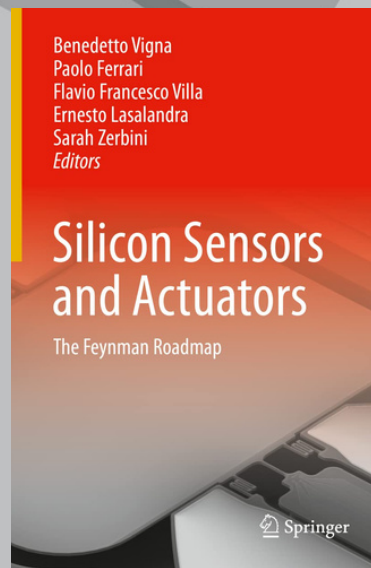
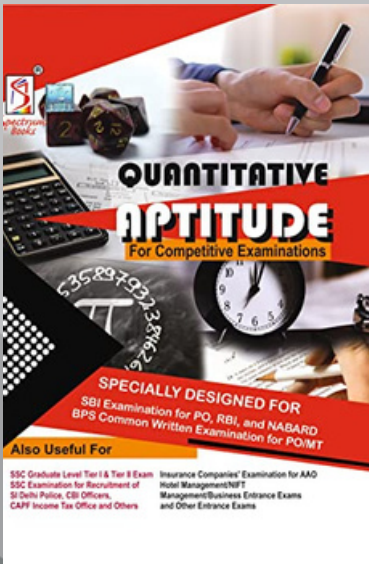
Machine Learning in Biological Sciences: Updates and Future Prospects



This book gives an overview of applications of Machine Learning (ML) in diverse fields of biological sciences, including healthcare, animal sciences, agriculture, and plant sciences. Machine learning has major applications in process modelling, computer vision, signal processing, speech recognition, and language understanding and processing and life, and health sciences. It is increasingly used in understanding DNA patterns and in precision medicine. This book is divided into eight major sections, each containing chapters that describe the application of ML in a certain field. The book begins by giving an introduction to ML and the various ML methods. It then covers interesting and timely aspects such as applications in genetics, cell biology, the study of plant-pathogen interactions, and animal behavior. The book discusses computational methods for toxicity prediction of environmental chemicals and drugs, which forms a major domain of research in the field of biology.

Source: Amazon

Ghosh, Syamasree | Dasgupta, Rathi(2022)Machine Learning in Biological Sciences:Updates and Future Prospects. Singapore, Springer Nature Singapore



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