

DIGITAL UNIVERSITY KERALA

Kerala University of Digital Sciences, Innovation and Technology

NEWSLETTER

DUK/NL/VOL:2/ISSUE 7/JULY 2023

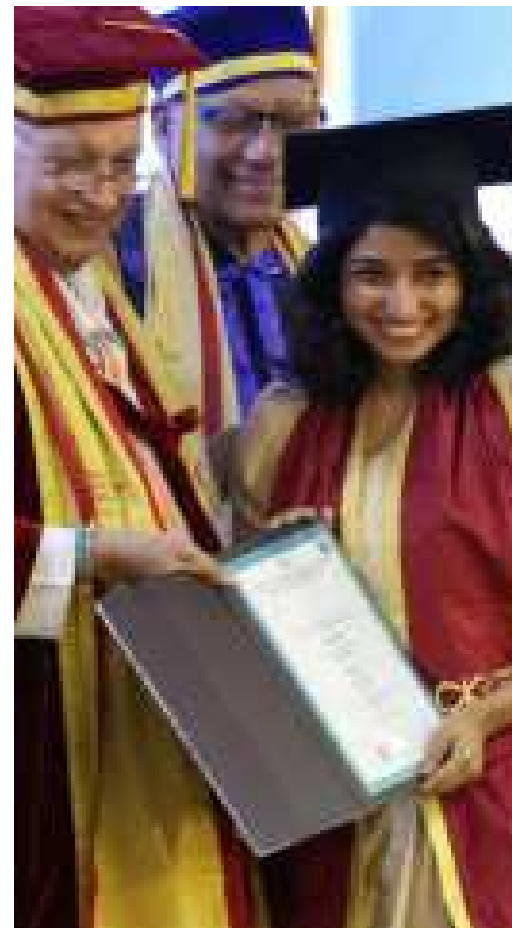


TABLE OF CONTENTS



- 01 -DUK 1st Convocation Ceremony
- 02 -Fireside Chat on Emerging Technologies: Future Discussion Series
- 03 -Emerging Technologies and the Disruption of Business
- 04 -Navigating the Cyber Security Landscape: Essential Training for Career Starters
- 05 -Plan your Future: Cyber Security Awareness for Early Career Professionals
- 06 -Physical Networking Session 2 of Post Graduate Certificate Program on Entrepreneurship: Small Business Management (PGCSBM) Batch 3
- 07 -3rd Networking Session
- 08 -CeTMS - A software Solution for Centralised eTicket Issuing, Monitoring and Analysis for Museums
- 09 -Academia Connect with SunTec

- 10 -Academia Connect with NeST Digital
 - EY GDS College Mentorship Program with DUK
 - Pursuing Higher Education in US
- 11 -Stakeholders' Meeting on Management of Waterbodies in Pothencode Panchayat
 - Social Engagement Cell's Meeting with HarithaKeralam Mission
- 12 -Seminar : Democratizing AI
- 13 -Gala Milo - Night Gathering of DUK
- 14 -Live streaming Chandrayaan-3 at DUK
 - DACE Program at Digital University Kerala
- 15 -Publications
- 16 -Knowledge Centre News
- 18 -Book Review of the Month
- 19 -New Additions to the Knowledge Centre Collection
- 23 -Convocation Ceremony Glimpse



DUK 1st Convocation Ceremony

Kerala University of Digital Sciences, Innovation, and Technology (Digital University Kerala) celebrated its first convocation on 31st July 2023 at CDAAC Amphitheatre, Thiruvananthapuram.

The event was attended by esteemed dignitaries, faculty members, graduating students and their parents, and was presided over by Prof. Vijay Chandru, Chairman, Board of Governors, Digital University.

Shri. Arif Muhammed Khan, Hon'ble Governor of Kerala and Chancellor of Digital University Kerala was the Chief Guest. Shri. Vinod Dham, Father of Pentium Chips was the Guest of Honour.

The ceremony began with a welcome address by Prof. Saji Gopinath, Vice Chancellor, Digital University Kerala. He congratulated the graduates and presented the annual report. In his keynote address, Shri. Vinod Dham highlighted the duties of graduating students and to discover their unique calling as they embark on their professional journeys. Prof. Vijay Chandru shared his experiences on the digital transitions in the nation. Hon'ble Governor emphasized on imbibing compassion, love, and emotional resilience along with the professional excellence in his convocation address.

In the convocation, 124 students were conferred with the degrees. Outstanding Awards of Academic Excellence was presented to Gokul G R, Mainak Sen, Justus Raju, Aparna S and Nima Bibhoosh. The convocation was followed by a panel discussion on Emerging Technology: Future Discussion Series. The panellist was Shri. Vinod Dham, Prof. C Mohan (Ex. IBM and Google Researcher and DUK Board Member), Prof. Vijay Chandru and Shri. Anoop Ambika (CEO, Startup mission) moderated the session.



Fireside Chat on Emerging Technologies: Future Discussion Series

A fireside chat on Emerging technologies: Future Discussion Series was hosted by Digital University Kerala, Technically supported by IEEE Kerala Circuits and Systems Society, Kerala Startup Mission and organised by The Institution's Innovation Council of Digital University Kerala. The speakers of the session were Shri Vinod Dham, popularly known as the "Father of Pentium Chip", Founder and Executive Managing Partner at IndoUS Venture Partners; Prof. Vijay Chandru, Chairperson, Board of Governors of Digital University Kerala, Executive Advisor of ARTPark AI and Robotics Technology Park, IISc; Dr. C Mohan, Expert Member of, Board of Governors of Digital University Kerala and Distinguished Professor of Science, Hong Kong Baptist University and the event was moderated by Shri. Anoop Ambika, CEO of Kerala Startup Mission. The sessions were set on three prominent contexts namely "Semiconductor Policies and Opportunities", "Artificial Intelligence trends and directions" and "Digital Biology" followed by a fireside chat with the panelists.



Emerging Technologies and the Disruption of Business

The Institution's Innovation Council (IIC) and Innovation Club - DUK organised a tech talk on "Emerging Technologies and the Disruption of Business". Ms. Edwina Fitzmaurice, Global Chief Customer Success Officer, EY, a well-known technologist was the speaker for the event. She leads a network of customer success technology hubs across EMEA, Asia-Pacific, and the Americas and she is a G20 speaker, World Economic Forum Global Future Council Member and a great influencer in the professional networking platforms. The talk dwelled on the immeasurable opportunities offered by the three major technological disruptions namely Web 3.0, Metaverse and Artificial Intelligence. The role of Gen Z, and Generative AI in the transformation of digital revolution was also discussed. The talk also emphasized the fact that innovation, enforcement and regulation are mutually reinforcing.



Navigating the Cyber Security Landscape: Essential Training for Career Starters

Kerala Security Audit and Assurance Center (KSAAC), an initiative of Digital University Kerala (DUK), hosted an awareness program on “Navigating the Cyber Security Landscape: Essential Training for Career Starters”. It was an awareness training organized for graduate students interested in securing their cyber space and pursuing a career in the field of cybersecurity. Held on July 15, 2023, the event aimed to provide attendees with valuable insights into the ever-evolving landscape of cybersecurity and equip them with essential knowledge and skills required to thrive in this industry. The knowledge gained from the event is expected to be instrumental in shaping the future careers of the participants and contribute to a more secure digital world.

Mr. Narendra Kumar K Manager - Channel Sales of EC Council, talked about the certifications in cyber security and its importance to plan a career in this area. Other sessions were handled by the team KSAAC.

The program was held at DUK campus. The sessions were scheduled from 10:00 AM to 4:00 PM. Nineteen participants actively participated in the program. The certificate of participation was awarded to all who actively participated.

The program was conducted under the CSR activities of the DUK.

The team KSAAC @ DUK is committed to hosting similar events in the future to further bridge the gap between academia and industry and help aspiring cybersecurity professionals realize their full potential.



Plan your Future: Cyber Security Awareness for Early Career Professionals

In an effort to educate and empower students in the field of cybersecurity, the Kerala Security Audit and Assurance Center (KSAAC), an initiative of Digital University Kerala (DUK), hosted a comprehensive program aimed at raising cyber security awareness and exploring career opportunities in this rapidly growing domain.

“Plan your Future: Cyber Security Awareness for Early Career Professionals” was conducted on July 8, 2023. It was specifically designed for 12th pass out and undergraduate students. The primary objective of this program was to equip students with fundamental concepts of cyber security, enabling them to safeguard information assets and mitigate the impact of potential cyber attacks.

Ms. Pooja Joshi, Senior Director and Country Head of EC Council talked about the certifications in cyber security and its importance to plan a career in this area. Other sessions were handled by the team KSAAC.

The program was held at DUK campus. The sessions were conducted from 10:00 AM to 4:00 PM. Seventy two students actively participated in the program. The certificate of participation was awarded to all who actively participated.

The program was conducted under the CSR activities of the DUK.



Physical Networking Session 2 of Post Graduate Certificate Program on Entrepreneurship: Small Business Management (PGCSBM) Batch 3

Physical Networking Session 2 was conducted for Batch 3 Post Graduate Certificate Program on Entrepreneurship: Small Business Management on 3rd July 2023 at Digital University Kerala. A total of 160 students registered for the program, and almost 100 showed up physically for the session. It was an online simulation of Business Strategy conducted in a workshop Mode. Mr. Abdul Baji took the one-day session from CESIM Business Simulations, Bangalore The School of Digital Humanities and Liberal Arts facilitated the one-day workshop.



3rd Networking Session and Final Examination for Batch 1 Post-Graduate Certificate program in Entrepreneurship: Small Business Management on 20th July 2023

The third networking session and final examination for Batch 1 PGCSBM students were conducted on 20th July 2023 at DUK campus. 102 eligible participants who cleared all the evaluation requirements attended the third networking session, and the final examination was conducted. A last project Review and Evaluation was overseen by Dr. Sini V Pillai. The Chair of School of Digital Humanities and Liberal Arts, Dr. Satheesh Kumar KG, addressed the students during the feedback session after the final examination.



CeTMS - A software Solution for Centralised eTicket Issuing, Monitoring and Analysis for Museums

Centre for Digital Transformation & Innovation (CDTI) submitted a Functional Requirements Specification (FRS) to the Dept. of Archaeology, Govt. of Kerala, as part of the project to develop an application for Centralised e-ticket Issuing and Monitoring System (CeTMS). The CDTI team conducted a detailed requirement study of the proposed software at 17 museums under the Department of Archaeology. The team prepared a comprehensive Functional Requirements Specification (FRS) based on the study. CeTMS will be a State-of-the-Art System that allows electronic management of museums, including management of ticket counters, museum publication stores, etc. It will have a dashboard to access real-time information on museum revenue and visitor information to all key stakeholders. Improved operational efficiency, digital payment system, comprehensive dashboard & management tools, and provision of high-quality services to citizens are the key objectives of the CeTMS. Discussions were held with the Archaeology Dept team on future possibilities for collaboration.



Prof Saji Gopinath, Vice Chancellor, DUK handing over the FRS document of CeTMS to the Shri E Dineshan, Director of Archaeology, GoK



Academia Connect with SunTec

On July 4, 2023, the Hon. VC and faculty members from DUK visited the SunTec campus as part of the industry-academic collaboration. The Hon' VC addressed the group with a brief presentation about the University, programs, and research goals. Mr. Vijaya Raghavan opened the formal discussion about the possibilities of collaboration, including providing opportunities for placement and internships.

The participants also discussed several potential areas for collaboration, including Research, Curriculum Development, Expertise sharing, MBA for working professionals, and many more. The meeting also discussed more general issues, such as the future of IT, the industry's challenges, and the role of universities in training the next generation of professionals. The goal of the meeting was to identify areas of mutual interest and explore ways to collaborate. By working together, the university and the company could benefit from each other's expertise and resources, and help to prepare students for successful careers in the IT industry. The meeting was productive, and both parties agreed to extend collaborations in various capacities. They are confident that working together can significantly contribute to the industry and help prepare students for successful careers. Along with Prof. Saji Gopinath, Prof. Manoj, Prof. Asharaf, Prof. Alex P James, Dr. Joseph Paul, Dr. Satheesh Kumar, Dr. Tony Thomas, Dr. Jose Joseph, Dr. Sini V Pillai, Dr. Sinnu, Prof. Pradeep, Mr. Mahendra K.S and Mr. Manu joined for the deliberations.



Academia Connect with NeST Digital

On July 6th, 2023, the DUK Placement Cell hosted an initial level meeting with NeST Digital to discuss collaboration opportunities. The chair of SOE, Dr. Jose Joseph, addressed the group and discussed several potential areas for collaboration, including Internship, Research collaboration, and Mentorship programs.

The meeting concluded with discussion of the following collaborating agenda by Prof. Alex James, Dean DUK. The two organizations agreed to extend and explore ways to collaborate in the following areas-

- Technical consultancy to set up the Centre of Excellence in EV for research and training
- Joint certification program on a revenue-sharing model
- Research collaboration - Joint development of Industry-specific solutions leveraging the domain expertise of NeST and the technology expertise of DUK
- Capacity building for NeST employees
- Industry-academia Knowledge enrichment programs by NeST



EY GDS College Mentorship Program with DUK

EY GDS College Mentorship Program, an initiative of EY GDS to foster meaningful relationships between DUK campus community and EY leaders, was launched on July 5, 2023. Ms. Smitha Nair, Associate Director (GDS Consulting- Internal Transformation Services), is the industry mentor from EY assigned to DUK.

Pursuing Higher Education in US

The Placement cell and Research Office jointly hosted a talk on different aspects of pursuing higher education in the USA on 21st July 2023. It was an excellent opportunity to understand the application process, scholarship, etc., from Ms. Shanthi Mohan, Advisor - Education USA (A US Department of State Network)



Stakeholders' Meeting on Management of Waterbodies in Pothencode Panchayat

As part of the integrated water body management initiative in the adopted villages of DUK, the Social Engagement Cell organised a stakeholders' meeting at DUK on 11th July 2023. Representatives of Harithakeralam Mission, Minor Irrigation Department, Mahatma Gandhi National Rural Employment Guarantee Scheme, Pothencode Panchayat members, Kudumbashree representatives, and faculty members from Eco-Informatics and Geo-spatial groups have participated. The direction of the DUK involvement in the preservation and better management of waterbodies was outlined by the esteemed Vice Chancellor of DUK, Prof. Saji Gopinath. He brought the attention of the audience to the various state-of-the-art inventions by various departments of DUK that may be used in such endeavors. Dr. T. N. Seema, Executive Director of the Navakeralam Mission, highlighted the need to use technological knowhow in future initiatives on waterbodies. At the event, all stakeholders shared their views on water body management. Pradeep Kumar K., Coordinator of the Social Engagement Cell emphasized the need to have a coordinated effort towards finding solutions to the many issues in the preservation and proper use of waterbodies. Prof Radhakrishnan, Dr. Sooraj and Dr Jose Joseph spoke on the potential contributions of their respective departments towards the initiative.



Social Engagement Cell's Meeting with HarithaKeralam Mission

As a part of the water bodies' management initiatives by DUK in its adopted village in Pothencode Panchayat, Social Engagement Cell@ DUK had a meeting with HarithaKeralam Mission at the latter's headquarters on 5th July 2023. Centre for Geospatial Technology and CV Raman Labs for Ecological Informatics from DUK also were part of the meeting. Representatives of the other stakeholders in this initiative - the Minor Irrigation Department, Mahatma Gandhi National Rural Employment Guarantee Scheme- were present in this meeting. The meeting underlined the role of the Digital University in facilitating the utilisation of technology in future for the better management of water bodies.

Democratizing AI

Student council conducted a seminar on the topic of "Democratizing AI" on July 21, 2023. Mr. Shamshad Ansari, CEO and co-founder of Accure Inc. in USA, led the session. He is an alumnus of IIITMK. The session helped students to learn more about new data science technologies and how they work. He opened up the world of AI through his short speech. Dr. Ashraf (Dean of Development) and Md. Meraj Uddin also participated in the event.



Gala Milo - Night Gathering of DUK

Student council started conducting a night gathering for students called "Gala Milo." It will be conducted once every two months to reduce academic stress and improve students' extracurricular activities. The first Gala Milo was conducted outside the hostel premises with light arrangements and black tea. Students presented their skills in the program. Students and staff also participated in the event.



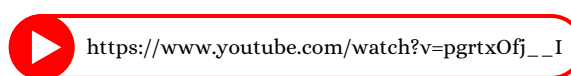
Live streaming Chandrayaan-3 at DUK

The Student Council initiated live streaming of Chandrayaan-3 at DUK. Chandrayaan-3 is a historic mission that will mark India's third lunar landing. It was vital for students to witness this event and learn more about India's space program. Students, staff, and faculty became witnesses to the launch.



DACE Program at Digital University Kerala

DACE program at Digital University Kerala prepares a student to develop digital solutions for social good. Students venture out to the downtrodden communities to understand their problems and develop viable digital solutions to address it. Song and photos of fisherfolk captured by DUK students during their visit at Valayathura, a fishing hamlet in Thiruvananthapuram, Kerala.





Best Paper Award

Dr. Anoop V. S. received the Best Paper Award for the Research Paper titled "We chased COVID-19; Did we forget Measles? - public discourse and sentiment analysis on spiking Measles cases using natural language processing" presented at the 16th Multi-disciplinary International Conference on Artificial Intelligence (MIWAI'23).



Dr. ANOOP V. S.
Research Officer | School of Digital Sciences

- Bonam, S., Bhagavathi, K. A., Joseph, J., Singh, S. G., & Vanjari, S. R. K. (2023). An Ultra-Flexible Tactile Sensor Using Silk Piezoelectric Thin Film. *IEEE Sensors Journal*.
- Ekstedt, M., Afzal, Z., Mukherjee, P., Hacks, S., & Lagerström, R. (2023). Yet another cybersecurity risk assessment framework. *International Journal of Information Security*, 1-17.
- Mathew, T., Elangovan, K., & Sreekantan, A. C. (2023). Accurate Interface Schemes for Resistance Thermometers with Lead Resistance Compensation. *IEEE Transactions on Instrumentation and Measurement*.
- Elangovan, K., & Sreekantan, A. C. (2023). Metrological Evaluation of Robust Relaxation-Oscillator Interface for Remote Resistive Sensors and its Application towards Realizing Few Industrial Measurement Systems. *IEEE Open Journal of Instrumentation and Measurement*.
- Ramesh, A., Haris, R., & Arora, S. (2023, May). ML based D 3 R: Detecting DDoS using Random Forest. In *2023 IEEE/ACM 23rd International Symposium on Cluster, Cloud and Internet Computing Workshops (CCGridW)* (pp. 141-146). IEEE.
- Subin C. Krishna, Anoop V. S., "Figurative Health-mention Classification from Social Media using Graph Convolutional Networks", 9th IEEE International Conference on Smart Computing and Communication (ICSCC'23)
- Devika N., Anoop V. S., Jose Thekkiniath, "Biomedical Named Entity Recognition from Malaria Literature using BioBERT", 9th IEEE International Conference on Smart Computing and Communication (ICSCC'23)
- Ardra K. R., Anoop V. S., Prashanth Panta, "OralMedNER: A Named Entity Recognition System for Oral Medicine and Radiology", 9th IEEE International Conference on Smart Computing and Communication (ICSCC'23)
- A. U. R, B. N. K. Reddy and A. James, "Hardware Implementation of an efficient FIR filter for ECG Signal Denoising Application," 2022 29th IEEE International Conference on Electronics, Circuits and Systems (ICECS), Glasgow, United Kingdom, 2022, pp. 1-4, doi: 10.1109/ICECS202256217.2022.9971114.



WEBSITE OF THE MONTH

Our World in Data



<https://ourworldindata.org/>

"Our World in Data" is a comprehensive and data-driven online platform that aims to provide a comprehensive understanding of the global trends, challenges, and progress across various facets of human development. The website serves as a repository of meticulously curated data visualizations, articles, and interactive tools, all designed to help users gain insights into topics spanning health, education, environment, technology, economics, and more.

Founded by Max Roser, an economist and researcher at the University of Oxford, "Our World in Data" is committed to promoting evidence-based decision-making and fostering a deeper understanding of the state of the world. The platform sources data from reputable international organizations, research institutions, and governmental agencies to present a balanced and accurate portrayal of ongoing trends and changes.

The website's visualizations and articles offer a user-friendly and engaging way to explore complex topics such as poverty, disease prevalence, energy consumption, and climate change. By presenting historical context alongside current data, the platform encourages a long-term perspective on global issues. Additionally, the interactive features allow users to customize data visualizations, facilitating deeper exploration and analysis.

"Our World in Data" is widely used by researchers, policymakers, educators, journalists, and the general public to access reliable information and gain a nuanced understanding of the world's progress and challenges. Its commitment to transparency, data-driven storytelling, and accessibility makes it an invaluable resource for those seeking to make informed decisions and contribute to meaningful discussions about our global future.



FREE SOFTWARE OF THE MONTH

QGIS - Open Source Geographic Information System

<https://qgis.org/en/site/index.html>



QGIS is an Open Source Geographic Information System. The project was born in May 2002 and was established as a project on SourceForge in June the same year. We have worked hard to make GIS software (which is traditionally expensive proprietary software) available to anyone with access to a personal computer.

QGIS currently runs on most Unix platforms, Windows, and macOS. QGIS is developed using the Qt toolkit (<https://www.qt.io>) and C++. This means that QGIS feels snappy and has a pleasing, easy-to-use graphical user interface (GUI). There are also independently created applications that allow you to take QGIS into the field. These applications can run on Android and iOS.

QGIS aims to be a user-friendly GIS, providing common functions and features. The initial goal of the project was to provide a GIS data viewer. QGIS has reached the point in its evolution where it is being used for daily GIS data-viewing needs, for data capture, for advanced GIS analysis, and for presentations in the form of sophisticated maps, atlases and reports. QGIS supports a wealth of raster and vector data formats, with new format support easily added using the plugin architecture.

QGIS is released under the GNU General Public License (GPL). Developing QGIS under this license means that you can inspect and modify the source code, and guarantees that you, our happy user, will always have access to a GIS program that is free of cost and can be freely modified.



BOOK REVIEW OF THE MONTH

Poetry Killer

A crime investigation novel (Malayalam Novel)

By Sreeparvathy



"Poetry Killer" by Sreeparvathy is an intricately woven tale of mystery, murder and relentless pursuit. Sreeparvathy has crafted a gripping narrative that leaves you spellbound until the conclusion, racing through the twists and turns to uncover the mystery.

The story follows the relentless pursuit of a brilliant police officer determined to uncover the killer's hidden agenda when a series of murders rocks the city. The killer never leaves a trace in the scenes; Instead, it has beautiful poems that hide cryptic clues that line a horoscope of murders to come "the poetry killer". This unique signature sets the stage for a thrilling investigation capturing your attention. The suspense intensifies with each murder, and the hunt for the Poetry Killer becomes a race against time.

You'll be drawn into a psychological game as the intricate plot unfolds. The pursuit of the Poetry Killer is a rollercoaster ride of twists and turns, challenging your deductive skills and keeping you guessing until the final resolution. The author's ability to create an atmosphere of intrigue and the gradual reveal of clues adds to the suspense, making this novel a compelling read for fans of the crime genre.

As the tension builds and the mystery pieces fall into place, you'll find yourself racing through the pages, unable to put the book down. Sreeparvathy's storytelling prowess and the inventive concept of a Poetry Killer create an unforgettable reading experience that will leave me recommending this novel if you are a crime fiction lover.



ABHIJITH S

M Sc Computer Science with
specialization in Cyber
Security

Dear March-Come in-
How glad I am-
I hoped for you before-
Put down your Hat—
You must have walked-
How out of Breath you are-
Dear March, how are you, and the Rest-
Did you leave Nature well-
Oh March, Come right upstairs with me-
I have so much to tell

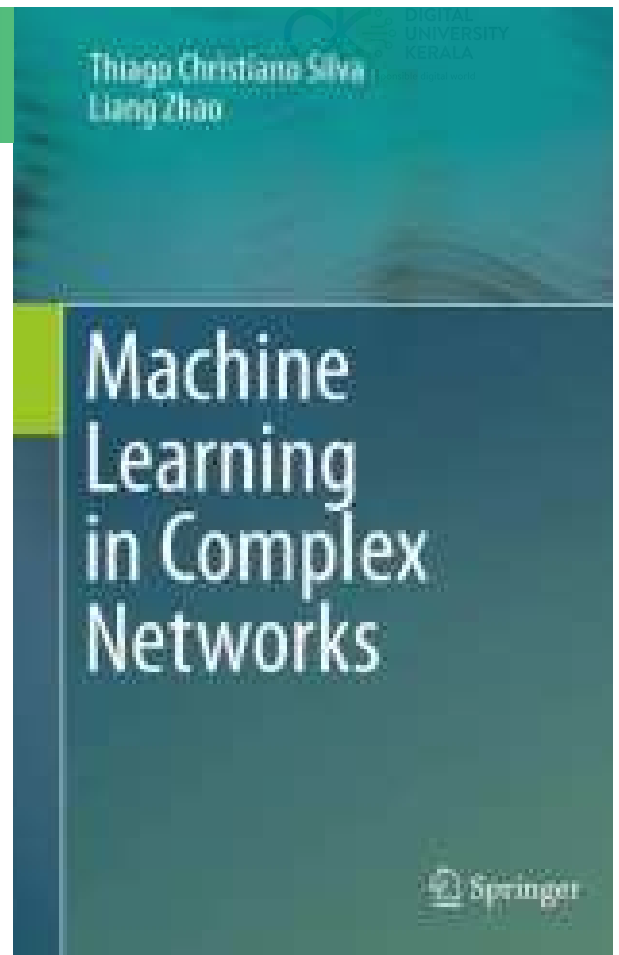
-Emily Dickinson

New Additions to the Knowledge Centre Collection

Machine Learning in Complex Networks

This book presents the features and advantages offered by complex networks in the machine learning domain. In the first part, an overview on complex networks and network-based machine learning is presented, offering necessary background material. In the second part, we describe in details some specific techniques based on complex networks for supervised, non-supervised, and semi-supervised learning. Particularly, a stochastic particle competition technique for both non-supervised and semi-supervised learning using a stochastic nonlinear dynamical system is described in details.

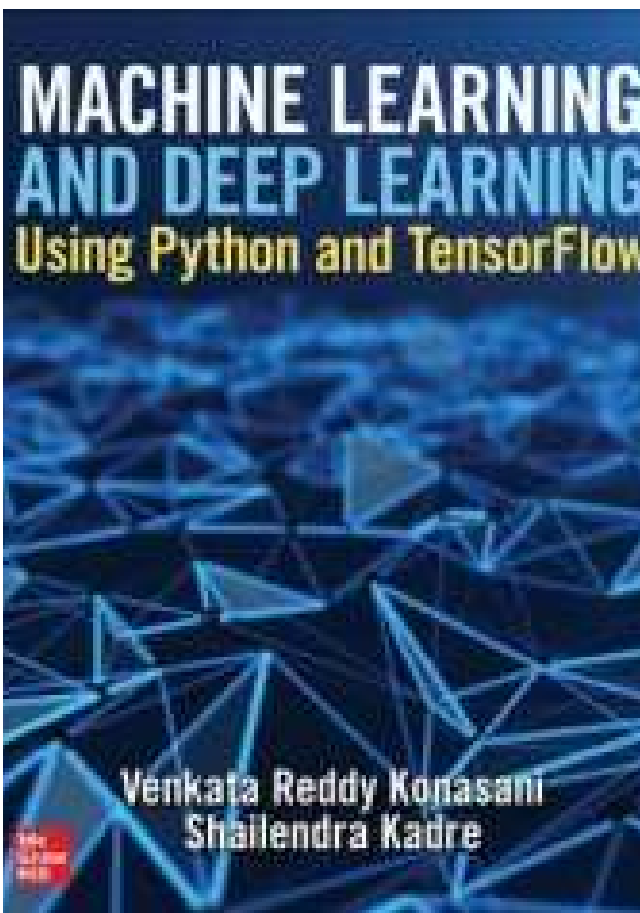
Source: Amazon
Silva, Thiago Cristiano(2016) *Machine Learning in Complex Networks*. Switzerland, Springer.



Machine Learning and Deep Learning Using Python and TensorFlow

This comprehensive textbook lays out the theories and applications of machine learning and deep learning in a style that is approachable for students and working professionals at all math skill levels. You will discover how to handle data, regression and logistic regression, decision trees, cross-validation techniques and error testing, artificial neural networks (ANN, CNN and RNN), random forests, boosting, and more. Machine Learning and Deep Learning Using Python and TensorFlow includes valuable case studies across professional domains, including banking, insurance, e-commerce, retail, and healthcare. The book presents examples using both Python and TensorFlow programming languages .

Source: Amazon
Konasani, Venkata Reddy(2021) *Machine Learning and Deep Learning Using Python and TensorFlow*. McGrawHill.

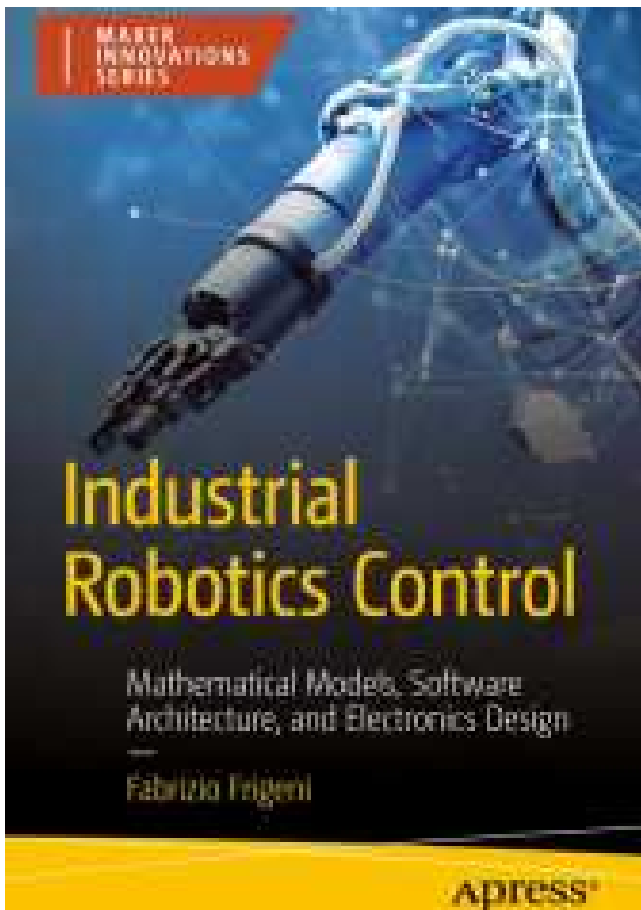
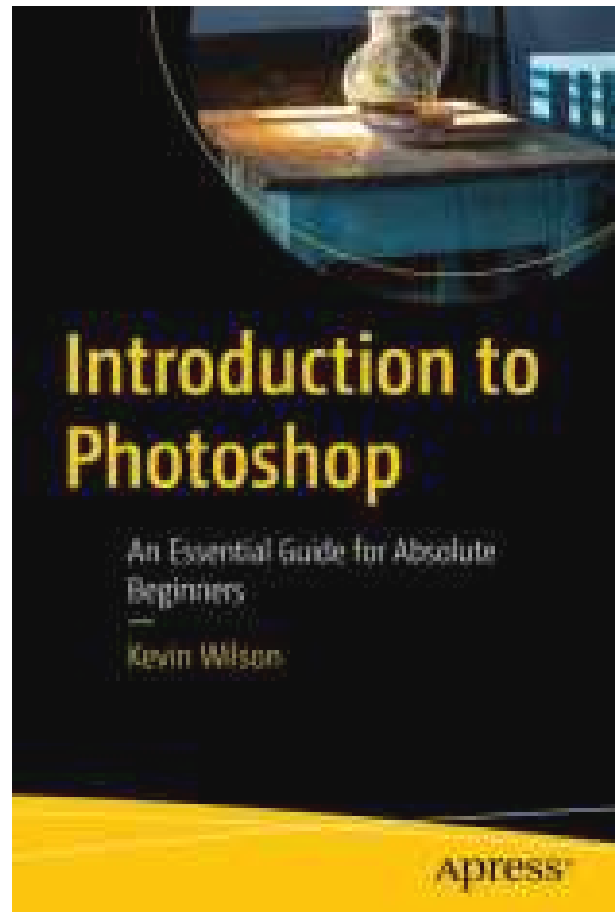


Introduction to Photoshop: An Essential Guide for Absolute Beginners

This full-color book is an essential guide to getting started with Adobe Photoshop. It's packed with tutorials, illustrations, and practical exercises to help you make sense of this complex and powerful software.

You'll start with the basics of Photoshop, including an overview of its myriad tools and other options. Next, you will learn about some of the common tasks that can be performed in Photoshop, such as how to touch up images and basic applications in photography. You'll also be walked through how to leverage Photoshop for special and 3D effects. Each and every technique author Kevin Wilson presents is illustrated step-by-step using screenshots with concise, easy to follow text.

Source: Amazon
 Wilson, Kevin (2023) *Introduction to Photoshop: An Essential Guide for Absolute Beginners*. New York, Apress.



Industrial Robotics Control Mathematical Models, Software Architecture, and Electronics Design

Build a complete control system for industrial robots, learning all the theory and practical tips from the perspective of an automation engineer. Explore the details of kinematics, trajectories, and motion control, and then create your own circuit board to drive the electric motors and move the robot. After covering the theory, readers can put what they've learned in practice by programming a control firmware for the robot. Each software component is described in detail, from the HMI and the interpreter of motion commands, to the servo loop controller at the core of each servo drive.

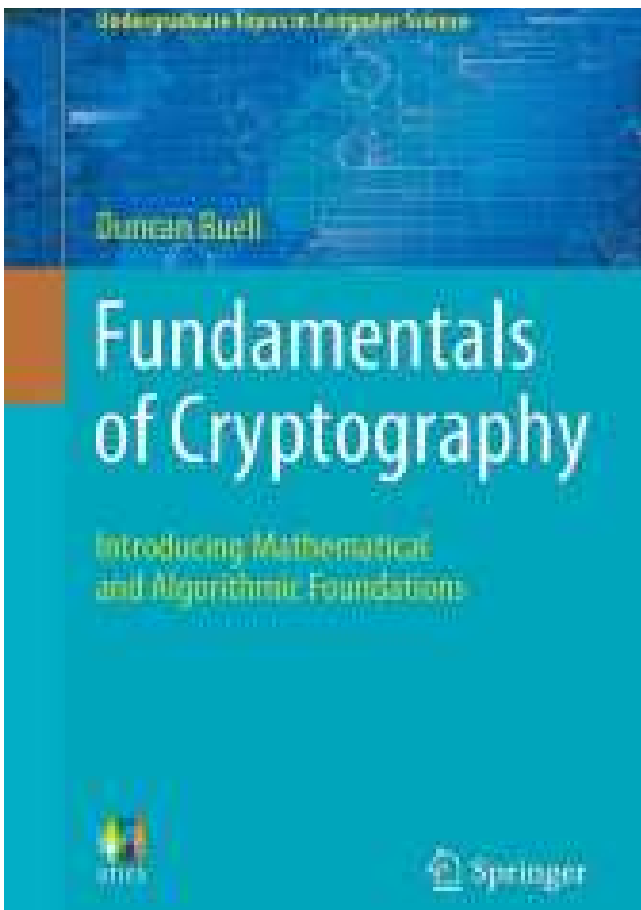
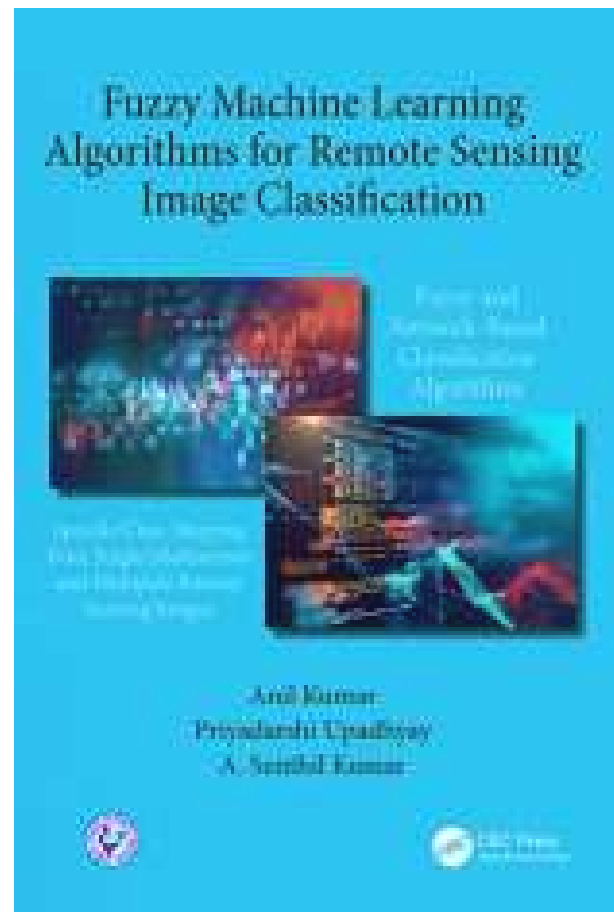
Source: Amazon
 Frigeni, Fabrizio (2023) *Industrial Robotics Control*. New York, Apress.

Fuzzy Machine Learning Algorithms for Remote Sensing Image Classification

This book covers the state-of-art image classification methods for discrimination of earth objects from remote sensing satellite data with an emphasis on fuzzy machine learning and deep learning algorithms. Both types of algorithms are described in such details that these can be implemented directly for thematic mapping of multiple-class or specific-class landcover from multispectral optical remote sensing data. These algorithms along with multi-date, multi-sensor remote sensing are capable to monitor specific stage (for e.g., phenology of growing crop) of a particular class also included.

Source :Publisher

Kumar, Anil(2021) *Fuzzy Machine Learning Algorithms for Remote Sensing Image Classification*. Boca Raton, CRC Press.



Fundamentals of Cryptography

Introducing Mathematical and Algorithmic Foundations

Cryptography, as done in this century, is heavily mathematical. But it also has roots in what is computationally feasible. This unique textbook text balances the theorems of mathematics against the feasibility of computation. Cryptography is something one actually "does", not a mathematical game one proves theorems about.

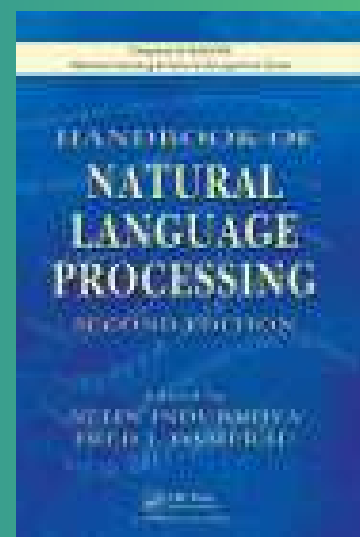
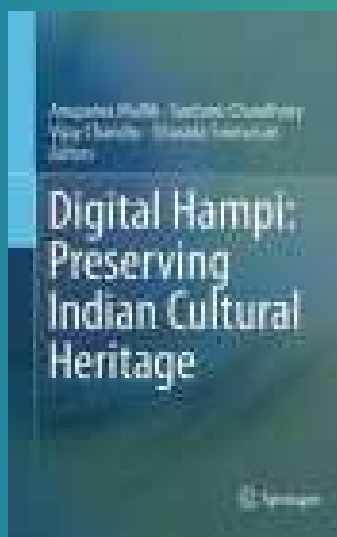
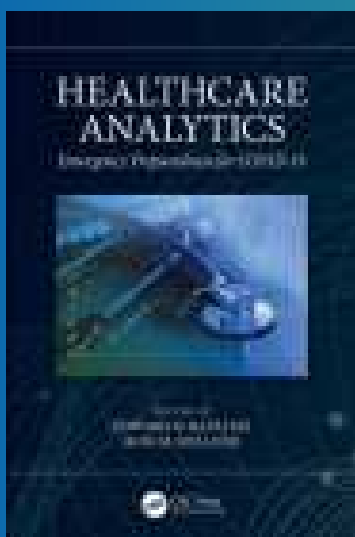
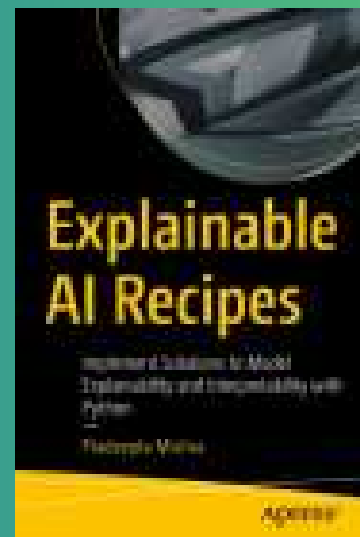
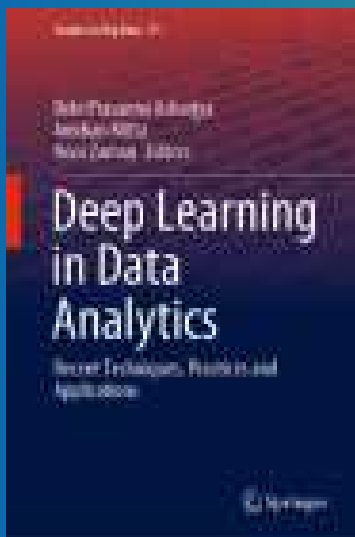
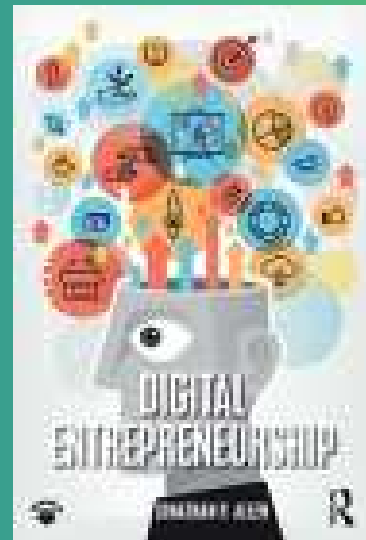
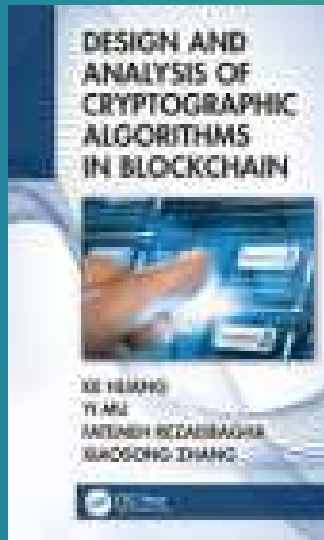
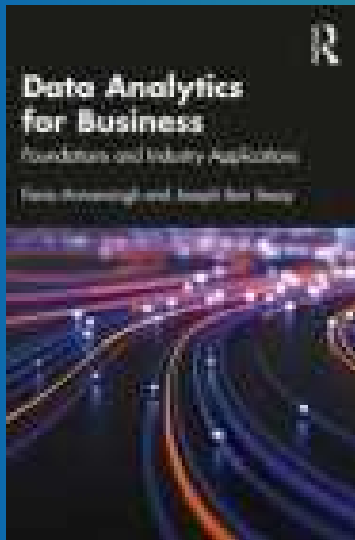
Source :Amazon

Buell, Duncan(2021) *Fundamentals of Cryptography*. Switzerland, Springer.

New Additions to the Knowledge Centre Collection

Find More New Titles

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



Convocation Ceremony Glimpse











DUK ADMISSIONS 2023



Formerly Indian Institute
of Information Technology
and Management - Kerala (IIITM - K)
Established by Government of Kerala



Don't wait, you learn.
Hands-on Experiments
in real-world Projects.



Strategic location
at Technopark Phase I & Phase II -
one of the largest IT parks in the country.



State-of-the-art campus
with advanced lab facilities.



Internship and placements
in leading companies.



Centres of Excellence in cutting-
edge technologies.



Strong industry-academic linkage.



MSc / MTech admission through
CUET PG / CUAT.



Scholarships for top-performing
students.



AICTE APPROVED PROGRAMS

B.Tech Computer Science & Engineering
Embedded Systems and Intelligence /
Artificial Intelligence / Cyber Security
Engineering
B.Tech Electronics Engineering
AI Hardware / AI-OT: Agri-Food Electronics /
Servers / Applied Materials / IoT and Robotics /
Biomedical Electronics / Microcontroller
Computing / Signal Processing/Hardware /
Quantum Technologies /
Semiconductor Manufacturing
Techniques

B.Tech Electronics

AI Hardware / AI-OT: Agri-Food Electronics /
Servers / Applied Materials / IoT and Robotics /
Biomedical Electronics / Microcontroller
Computing / Signal Processing/Hardware

B.Tech Computer Science

Data Analytics
Machine Intelligence
Cyber Security

B.Tech Energy

Ecological Information

BBA

Business Analytics / Digital Marketing /
Digital Transformation / Finance /
Human Resources / Information
Security Management / Marketing /
Operations / Systems /
Technology Management

B.Tech Data Analytics

Computational Analytics /
BIaaS / Cloud Analytics

M.Tech (Flexible)

Electronic Material Design

PhD

Theoretical Computer Science
Computational Intelligence
Systems & Networks
Computational Neuroscience



<https://duk.ac.in/admission>

Kerala University of Digital Sciences, Innovation
and Technology, Technopark Phase II,
Mangalapuram, Thiruvananthapuram, Kerala 695333

admission@duk.ac.in
admission-pro@duk.ac.in
0471-2720018, 0278333900

MBA

for Working professionals



- ① - AICTE approved MBA degree awarded by DUK
- ② - Suitable for working professionals
- ③ - Classes at Technopark Phase -1 Campus, Thiruvananthapuram

Apply Now

<https://duk.ac.in/admission/>



Digital University of Digital Science Innovation and Technology has commenced the application process for the on-campus MBA Program for working professionals for the academic year 2023 – 2025. The MBA Program for Working Professionals will be a part of an exciting learning environment in a verdant campus in Technopark Campus, Thiruvananthapuram.

Pre-requisites: Any Undergraduate Degree from a recognized University and minimum 2 years of relevant industry experience

Capacity: 30 working Professionals

Degree: MBA

Venue: Digital University Campus, Technopark Phase -1,
Thiruvananthapuram.

 Link to apply: <https://duk.ac.in/admission/>



Designed and Developed

@

**Knowledge Centre
Digital University Kerala**



Curating a responsible digital world

