# Digital University Kerala
# Newsletter

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DIGITAL UNIVERSITY KERALA
Curating a responsible digital world

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## Inside this Issue

Digital University Kerala signs MoU with Rubber Board

DST-CSRI post-doctoral fellowship for Dr Mithun Padmakumar

US Patent Granted to Dr. Jose Joseph

Knowledge Centre, Digital University Kerala conducts Workshop on Scholarly writing and Publishing

Faculty Publications

Training Programme for police department in AI and Data Analytics

## Digital University Kerala signs MoU with Rubber Board

DUK signed MoU with Rubber Board, Ministry of Commerce & Industry, Government of India, to design and develop a Mobile/Web Application for modernizing Rubber Board Extension System. The main users of the proposed solution will be the Extension Officers of Rubber Production department covering 45 Regional Offices and 131 Field Stations located at all important rubber growing areas in the country. The major objectives of the project are, modernizing the extension service deliverance using ICT tools, Database generation with geo tagging, effective coordination & monitoring of day-to-day activities of Extension Officers in the field in real time, documentation of all extension activities/ capacity building programmes, farmer education programmes etc.

## DST-CSRI post-doctoral fellowship for Dr Mithun Padmakumar

Dr. Mithun Padmakumar, (Visiting Research Fellow), 'Centre for Affective and Neurocomputing', SoDS. DUK has been selected for DST-CSRI post-doctoral fellowship. The project title is 'Control of pathological impulsive behavior using ultrasonic neuromodulation: A computational study' and the funding amount is Rs. 22 lakhs.

Online Pulic Access Catalogue of DUK Knowledge Centre
available at
http://libcat.duk.ac.in:8081/

## US Patent Granted to Dr. Jose Joseph

Dr. Jose Joseph, an assistant professor in the school of Electronic Systems and Automation, received a US patent entitled 'Contoured electrode for capacitive micromachined ultrasonic transducer'. This invention helps to enhance the performance of 'Capacitive Micromachined Ultrasonic Transducers'.

## One week Advanced Level Training Program on DSpace

The Knowledge Centre of Digital University Kerala is conducting one week (from 9th May 2022 to 13th May 2022) advanced level program on Dspace. Please join this program and enhance your digital library skills.
Course Content:
1. Introduction to Open Access and IRs.
2. Basics of Linux
3. Installation of DSpace
4. Customization of IR
5. Creating Communities, Sub Communities and Collections
6. Metadata in IRs
(Hands on training)
More details and Registration visit the below link:
https://sites.google.com/duk.ac.in/dspce/home

Digital University Kerala, Vice Chancellor Dr Saji Gopinath's response to Union Budget 2022 proposal More details

C V Raman Laboratory of Ecological Informatics under the School of Informatics of Digital University Kerala spearheading advanced studies in the field of biodiversity More details

## News from Centre of Excellence (COE)

- Kerala Blockchain Academy launched KBA Studio for providing video content for KBA channels

- Virtual Session on "Decentralized Finance and NFTs" at National workshop on Blockchain Technologies in association with Computer Society of India, Coimbatore Chapter on 26th Feb, 2022 from 11:15 am to 12:30 pm. There were 100 participants for the workshop.

**Knowledge Centre, Digital University Kerala conducts Workshop on Scholarly writing and Publishing**

Knowledge Centre, Digital University Kerala conducted 6 days Workshop on Scholarly writing and Publishing from 7th February 2022 to 12th February 2022. As many as 231 participants from outside and 70 participants from the university attended the workshop. The workshop was inaugurated by the Hon. Vice-Chancellor Prof Saji Gopinath on 7th February. Classes were handled by Dr M. Tapaswi, Dr I R N Goudar, Dr Santhosh Hulagabali and Dr Gopakumar V. Participants appreciated all the sessions and all sessions were very interactive. Video recordings are available with Knowledge Centre.

## Faculty Publications

Aiswarya S. Nair and Sabu M Thampi, PUFloc: PUF and Location Based Hierarchical Mutual Authentication Protocol for Surveillance Drone Networks, International Conference on Ubiquitous Security (UbiSec 2021), December 28-31, 2021, Guangzhou, China, Springer CCIS, vol 1557, https://doi.org/10.1007/978-981-19-0468-4_6

Roopak Surendran and Tony Thomas. "Detection of malware applications from centrality measures of syscall graph." Concurrency and Computation: Practice and Experience: e6835. https://onlinelibrary.wiley.com/doi/abs/10.1002/cpe.6835

Fahlander, P.; Ekstedt, M.; Mukherjee, P. and Dwivedi, A. (2022). Containment Strategy Formalism in a Probabilistic Threat Modelling Framework. In Proceedings of the 8th International Conference on Information Systems Security and Privacy - ICISSP, ISBN 978-989-758-553-1, pages 108-120. DOI: 10.5220/0010823800003120

Dr. Jose Joseph, Assistant Professor, one of his latest articles got published as the cover page of the February issue of IEEE Transactions on Ultrasonics Ferroelectrics and Frequency Control (IEEE TUFFC)
https://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=9695401&tag=1

## Training programme for Police Department in AI and Data Analytics

The Kerala Police, known to be one of the most tech-savvy police departments in the country, is trying their hands at disruptive technologies of Artificial Technology and Data Analytics in their efforts to stay ahead of the curve during this age of digital transformation. Aiding them in this venture is the Digital University Kerala, the country's first on-campus digital university. A specially designed training programme, Capacity Building in Responsible Artificial Intelligence and

Data Analytics for Police Department, was launched on Wednesday at DUK's campus at Pallippuram on Wednesday. Inaugurating the programme, Inspector General of Police (South Zone) P Prakash, said that the department is currently working on new software, iCoPS, to leverage the extensive volume of crime data available in the Crime and Criminal Tracking Network & System (CCTNS). The application of AI and Data Analytics tools will allow the department to create features in the software that are essential for next-generation policing. The ultimate outcome of this initiative is to reduce the workload of officers at police stations, enabling them to provide better services to the public.

DUK Vice Chancellor Dr. Saji Gopinath said in his presidential address that this programme marks the next level of e-Governance. This is the stage where we start optimizing the processes, making the government smart and predictive, or in other words, Intelligent, he said. 'We are looking at a series of projects for various government departments that are much more deep and hands-on with technology as a major component. We are very happy that we are starting this series with the Kerala Police department",

Dr. Saji Gopinath said. Snehil Kumar Singh IAS, Director, Kerala State IT Mission, said that when we talk about AI and Data Analytics it is something which we think is very futuristic but the reality is we are right in the middle of dealing with the possibilities of using those technologies in governance.

"The entire e-governance initiative was about introducing different applications, hardwares and products so that the governance improves in general. Now it is time we start onboarding people who have certain idea in data analytics and AI so that governance itself improves", the IT Mission Director said. Dr. Elizabeth Sherly, Dean (Academics), DUK, Mr. Dilli S, ASI and Coordinator, iCoPS and Mr Jayachandran M B, Chief Technical Officer, DUK, also spoke during the event. The training programme has 150 hours of classroom sessions that will be handled by industry experts and researchers. As many as 15 select officers from the police department will undergo the first batch of training.

# DUK ADMISSIONS 2022

## EARN WHILE YOU LEARN

**ON-CAMPUS PROGRAMS**

**Discover your opportunity in curating a responsible digital world**

DIGITAL UNIVERSITY KERALA

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

**Established by Government of Kerala**

- Earn while you Learn: Hands-on Experience in real-world Projects
- Strong industry-academia linkages (Maker Village, Kerala Blockchain Academy, thingQbator, Graphene Centre, Centre for Digital Innovation, Product Development etc. )
- State-of-the-art, verdant campus with advanced lab facilities
- Strategic location at Technocity (Technopark- Phase IV), Thiruvananthapuram - one of the largest IT parks in the country
- Internship and placement opportunities in leading companies
- Centres of Excellence in cutting edge technologies
- International curriculum and globally recognised faculty
- Scholarships for top performing, deserving students

**APPLY ONLINE**

https://duk.ac.in/admissions2022

**AICTE APPROVED COURSES**

### MTech in COMPUTER SCIENCE AND ENGINEERING
- Connected Systems and Intelligence
- Artificial Intelligence
- Cyber Security Engineering

### MTech in ELECTRONICS ENGINEERING
- Artificial Intelligence Hardware
- Signal Processing and Automation
- Artificial Intelligence Robotics
- Computational Imaging

### MTech in ELECTRONIC PRODUCT DESIGN (Flexible mode)

### MSc in COMPUTER SCIENCE
- Machine Intelligence
- Cyber Security
- Software Systems Engineering
- Speech & Language Processing
- Distributed Systems & Blockchain Technologies
- Data Analytics
- Geospatial Analytics

### MSc in ELECTRONICS
- Intelligent Systems and Imaging
- IoT and Robotics
- VLSI Design and Artificial Intelligence

### MSc in DATA ANALYTICS
- Data Analytics & Geoinformatics
- Data Analytics & Bio AI
- Data Analytics & Computational Science

### MSc in ECOLOGY
- Ecological Informatics

### MASTER OF BUSINESS ADMINISTRATION
- Business Analytics
- Digital Governance
- Digital Transformation
- Finance
- Human Resources
- Information Security Management
- Marketing
- Operations
- Systems
- Technology Management

### POST GRADUATE DIPLOMA
- e-Governance

*Deadline for submission of applications:*

**1st May 2022**

admission-pg@duk.ac.in duk.ac.in/admissions2022/

Admission open

# MSc Ecology
## specialising in ecological informatics

The 'linear pattern' of human resource consumption has destabilised our planet. The only thing we are certain of today is that our future will be different. We have to innovate immensely to overcome unpredictable challenges that lie ahead. The future belongs to those who can think forward in time and work towards a circular economy.

Incidentally, solutions to the challenges are already present in nature. We should learn to identify and adopt them.

Drawing inspiration from nature and designing appropriate solutions have emerged as sought-after employability skills. Bio-inspired Design (BiD) is pivotal in our transition to a circular economy and underpins the future of human life on the planet.

The Digital University Kerala (DUK) has pioneered an academic exercise on BiD for sustainable development in India. BiD is embedded as a course in DUK's MSc Ecology program, specialising in ecological informatics. The course introduces the concepts of BiD, imparts observational and design skills, leverages informatics in BiD and trains students to apply the knowledge to real-world problems.

DUK is currently inviting applications for MSc Ecology, specialising in ecological informatics. For more information, please visit www.duk.ac.in/admission

Admission open

DIGITAL UNIVERSITY KERALA

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# ADMISSIONS OPEN!

Join

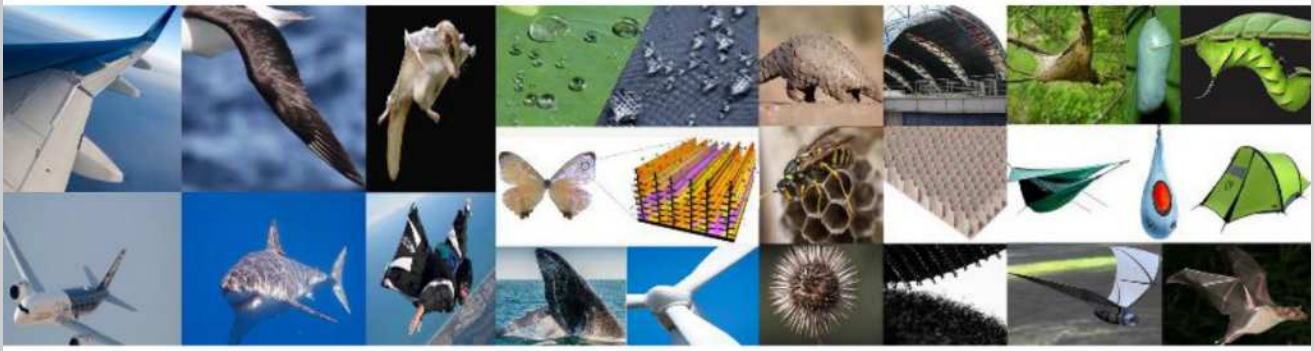
## M.Sc. ECOLOGY with Specialisation in Ecological Informatics

Want to be a

## BIOINSPIRED DESIGNER cum ECOLOGIST ?

*Pioneer M.Sc. Program in India to offer course on Bioinspired Design !!*

***BIOINSPIRED DESIGN: Technological innovations inspired by nature***



***Learn from nature and synchronize with nature***

***Apply bioinspired design for sustainable innovations in real-world and digital space***

"Ask the right questions, and nature will open the doors to her secret"

– C. V. Raman –

**To apply online, please visit: https://duk.ac.in/admission**

**Contact :** Email: admission-soi@duk.ac.in, Call: +91 90 610 650 79,
Course details: 0471 278 80 39 / 94 000 599 26

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# One week Advanced Level Training Program on DSpace

## Installation, customization and creation of Institutional Repository using DSpace

## 9th May 2022 to 13th May 2022

**to be conducted in hybrid mode. 30 participants to attend onsite, rest online through zoom platform**

**Register at**
**https://sites.google.com/duk.ac.in/dspce/home**

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**More details available in page 3**