DIGITAL UNIVERSITY KERALA
Curating a responsible digital world

Kerala University of Digital Sciences, Innovation and Technology

NEWSLETTER

Digital University Kerala
Thiruvananthapuram

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AI Ethics Day at Digital University Kerala

Digital University Kerala in association with Mozilla Responsible Computing Challenge India conducted AI Ethics Day at Digital University Kerala, on 07th September 2024. There were two parallel events - a talk on "Exploring AI Ethics" by Ms. Nidhi Sudhan (Co-Founder, Citizen Digital Foundation) and an Ideathon on AI Ethics for the students of Colleges and Universities. Mr. Jibu Elias (Country Lead for India , Responsible Computing Challenge, Mozilla Foundation) was the invited guest, Prof. Asharaf (Dean - Academics) delivered the welcome address, and Dr. Anoop V. S. (Principal Investigator, Mozilla Responsible Computing Challenge India Project at Digital University Kerala) presented the Vote of Thanks. 100+ Participants attended the talk session on "Exploring AI Ethics" and 15 student groups participated in the Ideathon competition on the topic "How to Make AI more Responsible and Inclusive for All".

Cash prizes, certificates, and mementos were distributed to the winners of the Ideathon after they presented their idea in front of a panel of judges consisted of Dr. Aswin V. S. (Assistant Professor, School of Digital Sciences) and Mr. Jibu Elias (Country Lead for India , Responsible Computing Challenge, Mozilla Foundation).

AI Ethics Day at Digital University Kerala

DUK InnoFest 2024

The annual Innovation festival of DUK was celebrated on 11th September 2024 by organizing the Smart India Internal Hackathon. The event received an overwhelming response with 192 students participating in the 24 hour hackathon attempting to solve various problem statements. The best three ideas were also awarded a cash prize.

DUK InnoFest 2024

DUK PROGRAMS

Design Thinking Workshop for Crafting Strategic Skills Sets for the Employees of KASE

A 3 day workshop was held for the employees of KASE from September 19-21 at Uday Suites, Shangumugham to equip participants with the knowledge and skills necessary to design and implement effective skill development initiatives that address current and future industry needs, leveraging innovative methodologies, fostering strategic partnerships, and cultivating strong leadership.

Design Thinking Workshop for Crafting Strategic Skills Sets for the Employees of KASE

Seminar on Industry Requirements by EY @ KSAAC

On September 3, 2024, KSAAC, in collaboration with EY, conducted a seminar on 'Industry Requirements with a Focus on EY's Expectations' for the Post Graduate Diploma in Cyber Security batch. The session featured Mr. Lince Lawrence, Global Leader in Cyber Security, and Mr. Dhanith Krishna, Senior Manager in Cyber Security at EY. Mr. Lawrence shared insights into industry trends and EY's strategies in the evolving cybersecurity landscape, while Mr. Krishna outlined the skills and competencies EY seeks in candidates. An interactive blue team (offensive) and red team (defensive) activity engaged students in cybersecurity defense strategies. Following the session, KSAAC faculty and EY representatives discussed potential collaborations, including knowledge exchange programs, internships, and placement opportunities for students.

Seminar on Industry Requirements by EY @ KSAAC

Cyber Security Awareness: The Need of the Hour

On September 29, 2024, KSAAC conducted a half-day session titled 'Cyber Security Awareness: The Need of the Hour' for elderly members of the Brahmana Sabha community at Mitraniketan City Centre. Led by Jyothi Ramaswamy, Adhoc Consultant and Rasic A Azeez, Cyber Security Engineer, the session focused on essential online safety practices, protecting personal information, and mitigating common cyber threats. Participants engaged actively, sharing their concerns on phishing, online fraud, and password security, while receiving practical solutions for safer digital navigation.

BlockHack 2024 Hackathon at Kerala Blockchain Academy

Kerala Blockchain Academy successfully organised the BlockHack 2024, the 32-Hour Blockchain Hackathon on the 21st and 22nd of September 2024. The event, held at the KBA campus, witnessed an overwhelming response from blockchain enthusiasts, developers, and students from across Kerala and near by states. The objective of BlockHack 2024 was to provide a platform for young innovative minds to come together and build decentralised solutions using blockchain technology. The hackathon was a resounding success that attracted over 140 participants, including students, working professionals, and Web3 developers. Participants were tasked with creating solutions in various categories, including decentralized finance (DeFi), real-world asset tokenization, decentralized applications (DApps), and metaverse. The event was open to both beginner and advanced developers, offering mentorship and support throughout the development process.

Hackathon Insights:

The event kicked off with an inaugural ceremony, where key mentors from KBA discussed the current trends and developments happening in the Ethereum blockchain. Participants then broke into teams, and development began. The energy through the 32 hours at the venue was palpable as teams worked diligently to develop their blockchain solutions. On the second day, teams continued working on their projects, racing against the clock to finalise their submissions. In the afternoon, each team presented their solution to a panel of judges. The teams were evaluated based on criteria such as innovation, technical implementation, real-world applicability, and the potential impact of their solution.

Winning Teams:
- **1st Place: We Eat Blocks**
- **2nd Place: Ledger Legends**
- **3rd Place: The Black Hat**
- **4th Place: Bytez**

BlockHack 2024 was a resounding success, bringing together a diverse group of blockchain enthusiasts and developers to innovate and build decentralised solutions. The hackathon showcased the potential of blockchain technology to address real-world challenges, and the creativity and technical prowess of the participants were commendable.

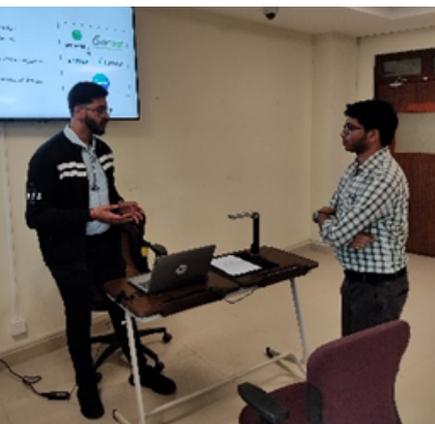# Session on Interview Skills for Second Year Students

The Training and Placement Cell organized an insightful session on Interview Skills on 25th September 2024 at Gallery Hall 45, which was attended by our second-year students. Mr. Bejoy Peter, a seasoned Corporate Trainer, was the facilitator for the event.

KIBO: Tranforming Education through AI : Demonstration

There was a special demonstration of the KIBO kit - the future of educational excellence at the Knowledge Centre on 25 September 2024.

The personnel from Trestle Labs Pvt. Ltd, Mr. Rishabh S detailed the advanced features such as real-time translation, audio-based learning, and accessibility options that align with NEP, NCERT, UGC, NAAC, and CBSE guidelines. The demonstration highlighted how the KIBO Kit can enhance teaching and learning experiences across diverse educational settings.

Design Thinking Workshop 2024

"Unlocking Human-Centric Creativity: A Design Thinking Journey for First-Year Students at Digital University Kerala"

A dynamic three-day Design Thinking workshop was conducted to empower all first-year students with the skills to solve real-world problems creatively. Facilitated by Dr. Sini V. Pillai, Assistant Professor, the workshop brought together students from diverse backgrounds, forming 30 groups, each tasked with addressing unique challenges using design thinking principles.

The workshop was a remarkable demonstration of collaboration, creativity, and critical thinking. Students were introduced to the key stages of the design thinking process—empathizing with the user, defining the problem, ideating solutions, prototyping, and testing. What stood out most was their ability to bring fresh perspectives to various problem statements and translate these ideas into tangible solutions.

One standout project was reimagining the university library as a collaborative learning space. The group designed a prototype that featured movable furniture, smart boards, and virtual collaboration spaces. This innovative setup not only encouraged physical and digital interaction but also provided food choices, creating a comfortable and interactive learning environment. Their approach was an excellent demonstration of how design thinking can revitalize existing spaces to make them more functional and relevant for the modern learner.

Another project that captured attention was developing a smart bin system that linked waste management to a rewards system. The solution involved a bin that converts the quantity of waste disposed into trash tokens, which students can redeem for activity points or discounts at the campus café. The group also designed a companion website and mobile app to allow real-time tracking of token earnings and redemptions. This innovative approach cleverly integrated sustainability with incentivized behavior, demonstrating the students' commitment to environmental consciousness.

A third notable project focused on improving campus safety. The group designed an app with a "safe walk" option, allowing students to request a security escort or notify a trusted friend of their route and estimated arrival time. This proactive solution emphasized the importance of safety in student life while incorporating user-friendly technology to enhance the overall campus experience.

Each project reflected the students' ability to think critically, innovate, and take ownership of their solutions. Their journey from empathizing with the end user to ideating and prototyping showcased a deep understanding of design thinking principles. The role-play sessions, which allowed them to demonstrate their solutions creatively and engagingly, were especially inspiring. The three-day workshop was a resounding success.

Flower Harvesting

On 11th September 2024, DUK celebrated a joyful flower harvesting event in preparation for the University's Onam festivities. The event saw enthusiastic participation from the staff and students of the DUK, Vice-Chancellor, and other faculty members.

The vibrant event marked the start of Onam celebrations at DUK, with the harvested flowers set to adorn the traditional floral carpets pookalams, which are an integral part of the festival. The SEC (Social Engagement Centre) staff and students, along with the Vice-Chancellor and faculty, worked hand-in-hand to harvest a variety of beautiful flowers grown specifically for the occasion. The fields were alive with color, reflecting the spirit of Onam.

Beach Cleaning – Vettucaud Beach

On 21st September 2024, the SEC (Social Engagement Centre) team actively participated in a beach clean-up drive at Vettucaud Beach, Thiruvananthapuram, organized by Volunteer for India, in celebration of International Coastal Cleanup Day. The event brought together numerous volunteers with the shared goal of protecting and preserving our coastal environment.

The beach clean-up drive was an opportunity for SEC members to contribute to a larger environmental cause by removing waste and debris from the beach, thereby helping restore the beauty of the coastline. The initiative also aimed to raise awareness about the pressing issue of marine pollution and its impact on marine ecosystems and communities.

DUK-Allianz Best Social Impact Award- First-Round Selection

On 11th September 2024, the prestigious Allianz-DUK Award entered its first round of selection at the Digital University Kerala. Eight selected teams showcased their innovative projects in front of a distinguished panel of members, including Allianz and Start-up Mission technical experts. The presentations reflected the participants' creativity, hard work, and problem-solving abilities, each aiming to bring meaningful change through their groundbreaking ideas.

After a thorough evaluation, the panelists selected four teams to proceed to the next round. These teams demonstrated exceptional ingenuity, with projects that stood out for their potential to drive innovation and societal change. The selected teams will now advance to the next round, bringing them one step closer to winning the coveted Allianz-DUK Award.

Malinyamuktha Nava Keralam– Ward thala janakeeya samithi

As part of the Malinyamuktha Nava Keralam waste-free Kerala campaign, Keezhthonnekkal Village in Pothencode Panchayat conducted a ward-wise people's committee meeting on 26 September 2024 to discuss campaign activities on October 2nd 2024. The campaign started on October 2nd 2024 and will be concluded on March 30th 2025, which is International Zero Waste Day. The members from the Social Engagement Centre of DUK participated in the meeting. More activities will conducted to achieve zero waste in Kerala.

SEC CORE ASSOCIATES LIST

Angitha Sreera
MSc Ecology with Specialization in Ecological Informatics

Anjitha Sivakumar
MSc in Computer Science with Specialization in Machine Intelligence

Biswadas E J
MSc in Computer Science with Specialization in Data Analytics

Devika S Babu
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Gouri S
MSc in Computer Science with Specialization in Cyber Security

Harikrishnan R
Master of Business Administration

Jishnu P
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Lekshmi S
MSc Electronics

Neeraj Jayesh
MSc in Computer Science with Specialization in Cyber Security

Neha Krishna V G
Master of Business Administration

Priyanshri Bhargab
MSc Ecology with Specialization in Ecological Informatics

Sanath P
MSc Applied Physics

Shamnad A
Master of Business Administration

Sneha Santhosh
Master of Business Administration

Vaisakh S
Master of Business Administration

ARAVAM 2024
A Grand Onam Celebration at Digital University Kerala

On 12th September 2024, Digital University Kerala came alive with vibrant festivities as the university celebrated Onam under the banner "ARAVAM".
The entire day was filled with colors, culture, and joy, marking the spirit of unity and tradition that this festival embodies. From the elegant Athapookalam competition to the rhythmic beats of Chingari Melam, the event was a mesmerizing spectacle, bringing together students, faculty, and staff in a shared celebration of Kerala's beloved festival.

Student Council members worked tirelessly to make the festival a success Malavika Pradeep, Arts Secretary managed the games and other programs, Abhiram S , Sports Secretary took charge of arranging and decoration, Anila Wilson anchored the event, Arun Raj T coordinated Tug of War and Amal C Rajesh handled the main attapookkalam. Their efforts were supported by volunteers from various departments, ensuring that every aspect of the celebration came together seamlessly.

ARAVAM 2024 was a true celebration of Kerala's rich cultural fabric, filled with music, dance, games, and tradition, making it a day to remember for the entire Digital University Kerala community.

Onam Celebrations at Phase 1 Campus, DUK by PMAJAY Students

Students under the PMAJAY Scheme organized a grand Onam celebration at Technopark Phase 1 Campus on September 11, 2024. The event saw enthusiastic participation from distinguished professors and staff, making it a memorable occasion. It began with an official inauguration, followed by cultural performances showcasing the spirit of Onam. The Cyber Security and Blockchain teams led the well-coordinated festivities. A highlight was the traditional Onam Sadya, which brought together students, faculty, and staff for a shared cultural experience, along with engaging games that added to the festive atmosphere.

Intramural Chess Competition

The Intramural Chess Competition, held on 24th September 2024 at Mess Hall, DUK, was a resounding success. The event was inaugurated by Dr. Mujeeb A, Registrar and welcomed by Abhiram S (Sports Club Secretary), Mr. Murali R Deputy Registrar (Administration) and Md Meraj Uddin (Student's Council Chairman) facilitated the competition, while Mr. Sohan Students Council Secretary, expressed gratitude to all participants and organizers. Five houses- Grey, Redox, Blue Buzzards, Green Falcons and Yellow Raptors competed in the league format competition, consisting of 5 rounds. Grey House secured 1st place, followed by Redox and Yellow Raptors in the men's section, while Green Falcons took 1st place, followed by yellow Raptors and Gray House secured 2nd and 3rd place in the women's section. The competition showcased the intellectual prowess and competitive spirit of DUK students and staff promoting camaraderie, strategy and critical thinking.

1st Place : Gray House

2nd Place: Redox House

3rd Place: Yellow Raptors

1st Place: Green Falcons

2nd Place: Yellow Raptors

3rd Place: Grey House

Intramural Table Tennis Competition

On 29th September 2024, the Intramural Badminton Tournament was held at the Mess Hall from 10:00 AM to 5:00 PM. The league-format competition featured five participating houses, with each house competing in four matches.
The tournament winners were:

Men's Doubles Winners

1st place: Blue House   **2nd Place: Yellow House**

Women's Doubles Winners

1st Place: Yellow House   **2nd Place: Blue House**

Mixed Doubles

1st Place: Blue House   **2nd Place:Yellow House**

Each match consisted of three rounds, with total points determining the score. Blue House demonstrated exceptional skill, securing top spots in Men's and Mixed Doubles, while Yellow House excelled in Women's Doubles. The tournament showcased impressive skills and teamwork among participants.

Intramural Carrom Competition

On 25th September 2024, the Intramural Carrom Competition was held at the Mess Hall from 05:00 PM to 07:00 PM. The Intramural Carrom Tournament was a resounding success, witnessing intense competition among the participating houses.

WOMEN'S SECTION WINNERS

1st place: Blue Buzzards

2nd Place: Yellow Reptors

3rd Place:Grey Giants

MEN'S SECTION WINNERS

1st place: Blue Buzzards

2nd Place: Redox

3rd Place: Grey Giants

Blue House emerged as the overall champion in both men's and women's sections, while Redox (men's section) Yellow Raptors (women's section) secured second place and Gray House secured the Third Position in both categories. Mithun and Abhiram S were the tournament mangers.

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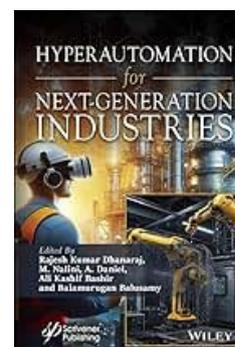 https://doi.org/10.1103/PhysRevE.110.044302

BOOK CHAPTER

Chapter 3

Artificial Intelligence-Based Hyperautomation for Smart Factory Process Automation

S. Balasubramaniam, A. Prasanth, K. Satheesh Kumar, Seifedine Kadry

Book Editor(s):Rajesh Kumar Dhanaraj, M. Nalini, A. Daniel,
Ali Kashif Bashir, Balamurugan Balusamy

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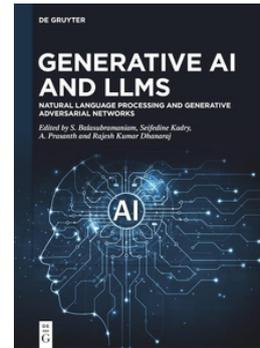https://doi.org/10.1002/9781394186518.ch3

PATEND GRANTED

Anoop C. S. and Elangovan K, "Digitizing Interface Circuit Topology and a Measurement Strategy for Grounded RC-Based Impedance Sensors", Indian Patent, Granted (Patent No: 550477).

BOOKS PUBLISHED

Balasubramaniam, S., Kadry, S., Prasanth, A. & Kumar Dhanaraj, R. (2024). Generative AI and LLMs: Natural Language Processing and Generative Adversarial Networks. Berlin, Boston: De Gruyter.

About this Book
Generative artificial intelligence (GAI) and large language models (LLM) are machine learning algorithms that operate in an unsupervised or semi-supervised manner. These algorithms leverage pre-existing content, such as text, photos, audio, video, and code, to generate novel content.

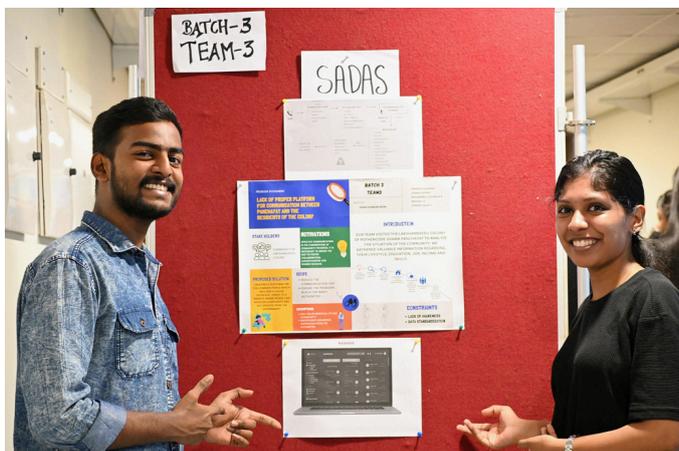**For More Details:**

https://doi.org/10.1515/9783111425078

SADAS Project Shines as Finalist in Ignite Program by Darsana Society

The SADAS project has been selected as a finalist in the prestigious Ignite program, organized by the Darsana Society. The competition, known for its rigorous three-stage selection process, saw the project advance through all stages to secure a spot in the finals. The culmination of the selection journey was marked by an impressive presentation at Kozhikode, where the team showcased their innovative work.

The event featured a series of captivating presentations and insightful feedback from a panel of experts, providing the team with valuable exposure and learning opportunities. Representing the University on such a prominent platform was a significant achievement, instilling pride and motivation for the entire team.

The recognition as a finalist has reinforced the team's commitment to advancing their work on SADAS. They are optimistic about building on this success and eagerly anticipate the next steps in their ongoing journey.

DIGITAL UNIVERSITY KERALA

Check the OPAC of Knowledge Centre for new additions
and their availability at

http://libcat.duk.ac.in