



Activity Report 2023-24
Free/Libre Open Source Software (FLOSS) Club
&
Free/Libre Open Source Software (FLOSS) Student Community, IEDC

Vision of the Institute

To become a paragon institution for pursuance of Education and Research in Engineering and Technology

Mission of the Institute

- *Impart finest quality Technical Education and Training*
- *Nurture a vision of Sustainable development*
- *Bequeath it to the next generation of professionals*



Innovation & Entrepreneurship Development Centre (IEDC)



LBS College of Engineering, Kasaragod

FLOSS Faculty Members 2023-24

1. Dr.Sarith Divakar M, Assistant Professor ,CSE	Coordinator
2. Dr.Smithamol M.B , Associate Professor ,CSE	Member
3. Dr.Mary Reena K E, Associate Professor, ECE	Member
4. Sri. Binoy D M Panicker, Assistant Professor CSE	Member
5. Sri. Anish Joseph Jacob, Assistant Professor,EEE	Member
6. Sri..Abhilash V Nair , Assistant Professor,EEE	Member
7. Sri .Binu K S,Tadesman, CSE	Member

FLOSS Student Members 2023-24

S No	Name	Execom Role
1	Abhinav K M	Student Ambassador
2	Anurag Mohanan	Member
3	Thanveer Ahmed T M	Member
4	Shithil K	Member
5	Sreedeeep Cv	Member
6	Vaishnav P	Member
7	Ashwanth Nv	Member
8	Pratheek Rao K B	Member
9	Rishikesh M Sujith	Member
10	Karthik Raj K T	Member
11	Umar Al Mukhtar Ibrahimkutty	Member
12	Vishal S	Member

ACKNOWLEDGEMENT

We take this opportunity to express our deep sense of gratitude and sincere thanks to all who helped us in all our programs and initiatives. We extend our profound gratitude to Dr. Sarith Divakar M, Assistant Professor in the Department of Computer Science and Engineering, for his exceptional guidance, constructive criticism, and invaluable comments. His unwavering support and enthusiasm have propelled us to where we stand today. We are also indebted to the faculty team for their outstanding mentorship, positive feedback, and valuable insights. Special thanks to Dr. Rajeev R R, Program Head, for his unwavering support and guidance. We deeply appreciate Dr. Sunil TT, Director of ICFOSS, for his support and cooperation. Finally, we express our gratitude to all former members of FLOSS, our Alumni Network, and our friends whose contributions, both direct and indirect, have played a crucial role in the successful completion of the Academic Year 2023-24.

Place: Kasaragod

Date: 31/03/2024

Abhinav K M

Student Ambassador

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CHAPTER 1

INTRODUCTION

The International Centre for Free and Open Source Software (ICFOSS) is an autonomous organization established by the Government of Kerala, India. It has a dual mandate: to promote the universal use of Free and Open Source Software (FOSS), consolidate early FOSS initiatives in Kerala, and foster collaboration with various nations, communities, and governments to advance FOSS globally. Under ICFOSS's guidance, LBS College of Engineering, Kasaragod, initiated the FLOSS (Free/Libre Open Source Software) Club in 2016. The club aims to underscore the importance of open-source software and its utility as academic tools.

Objectives of the FLOSS Club

- **Promoting Awareness:** Raise awareness about the benefits and importance of Free and Open Source Software among students, faculty, and the broader community.
- **Education and Training:** Provide education and training opportunities related to FOSS technologies, tools, and practices, through workshops, seminars, and tutorials.
- **Community Building:** Foster a sense of community among students and enthusiasts interested in FOSS, providing a platform for collaboration, knowledge sharing, and networking.
- **Contributions to FOSS Projects:** Encourage members to contribute to FOSS projects, either by coding, documentation, testing, or other forms of involvement, thereby promoting a culture of contribution and giving back to the FOSS community.
- **Advocacy:** Advocate for the adoption of FOSS in academic institutions, businesses, and government organizations, highlighting its advantages in terms of cost, flexibility, security, and innovation.
- **Support for FOSS Initiatives:** Support initiatives aimed at promoting and advancing FOSS locally and globally, including participation in FOSS events, conferences, and hackathons.

- **Skill Development:** Provide opportunities for members to develop technical skills, leadership abilities, and project management capabilities through hands-on involvement in FOSS-related activities.
- **Collaboration:** Collaborate with other FOSS clubs, organizations, and communities regionally, nationally, and internationally to exchange ideas, resources, and best practices.
- **Open Source Advocacy:** Advocate for policies and practices that promote openness, transparency, and collaboration in software development and distribution.
- **Innovation:** Encourage innovation and creativity in the development and use of FOSS, exploring new technologies and approaches to address emerging challenges and opportunities.

The FLOSS (Free Libre Open Source Software) Club conducts a diverse array of programs to promote the adoption, understanding, and contribution to open-source software. These initiatives encompass workshops covering various facets of FOSS, seminars featuring industry experts and academic leaders, hackathons fostering collaborative problem-solving and project development, and training sessions aimed at enhancing members' technical proficiencies within the FOSS domain. Additionally, the club hosts contributor days to facilitate direct involvement in FOSS project contributions, organizes open-source software demonstrations to showcase practical applications, and advocates for FOSS adoption through community-building activities and participation in advocacy events. Through these multifaceted programs, the FLOSS Club fosters a vibrant community of enthusiasts, empowers skill development, and cultivates a culture of innovation and collaboration within the FOSS ecosystem.

CHAPTER 2

EVENTS ORGANISED

Sl. No.	Date	Name of the Programme
1	23-8-2023	ML App Launchpad
2	26-9-2023	Introduction to Campus community chapters
3	6-10-2023	Python for Machine Learning

ML App Launchpad

On August 23, 2023, the FLOSS Club conducted a highly successful ML App Launchpad - Code to Cloud session as part of its ongoing activities. Hosted at SDPK, the session aimed to provide attendees with practical insights into the development and deployment of machine learning applications. Dr. Nithin G, an esteemed Empanelled Trainer at ICT Academy, expertly led the session, drawing upon his extensive expertise in machine learning and data science. With his guidance, participants embarked on an immersive journey into the world of ML, gaining invaluable knowledge and skills along the way.

The session commenced with a comprehensive overview of machine learning principles and techniques, setting the stage for hands-on practical exercises. Dr. Nithin G adeptly navigated participants through various stages of ML application development, covering topics such as data preprocessing, model training, evaluation, and deployment. Throughout the session, Dr. Nithin G's engaging teaching style and depth of knowledge captivated attendees, fostering an enriching learning experience. Participants actively participated in interactive discussions, eagerly seeking guidance and clarification on complex concepts.

Dr. Nithin G emphasized the significance of the "Code to Cloud" approach in modern ML projects. He highlighted how this comprehensive methodology, encompassing the entire ML lifecycle from coding to cloud deployment, streamlines development processes and maximizes the potential impact of ML models. Dr. Nithin G reiterated the importance of mastering coding skills for model development while leveraging cloud-based infrastructure for seamless deployment and scalability. He encouraged participants to apply the knowledge gained in the session to their future ML projects, emphasizing the transformative potential of this integrated approach in driving innovation and solving real-world problems. With this, Dr. Nithin G concluded the session,

leaving attendees inspired and equipped with practical insights to embark on their own "Code to Cloud" ML journeys. Overall, the ML App Launchpad session, led by Dr. Nithin G, proved to be a resounding success, exemplifying the FLOSS Club's commitment to promoting technological literacy and fostering innovation within the community.

ICFOSS Facebook Post:

ICFOSS is elated to share the activities of its FOSS Clubs at institutions. FOSS Clubs are student clubs of the FOSS Cell of ICFOSS, aims to provide promotional service of FOSS to educational institutions by promoting the formation of a group of interested students and teachers. It is a platform wherein we foster a culture of collaboration, innovation, and knowledge sharing among students and faculties.

FLOSS Club at LBS College of Engineering, Kasargode, one of the FOSS Clubs of ICFOSS has organised an event on the topic "Code to Cloud Machine Learning". Delighted to know that over 50+ students have attended the session for an enthralling Journey into Machine Learning. Dr Nithin G, the Resource Person for the event has enlightened the participants, through a hands-on journey in ML. We hope to see more such engaging and informative events from the FOSS clubs across Kerala.

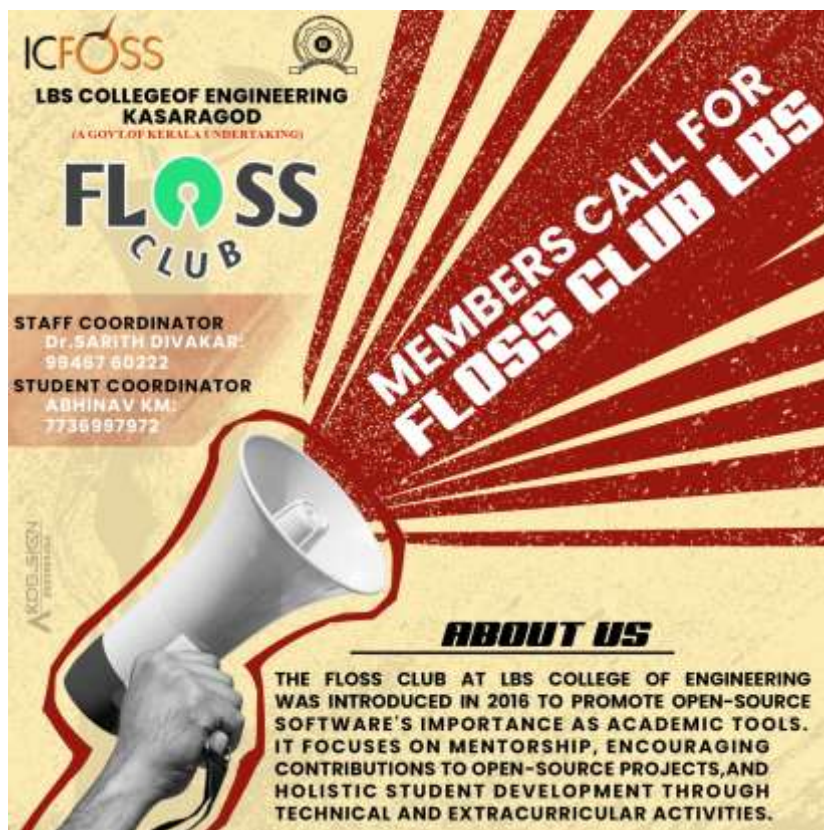
Link: <https://www.facebook.com/photo/?fbid=623059949956970&set=pcb.623060439956921>





Introduction to Campus community chapters

On September 26, 2023, the FLOSS Club orchestrated a captivating session with Abhinav K M as the lead speaker, dedicated to introducing campus community chapters. This enlightening gathering not only shed light on the dynamic landscape of the FLOSS Club Student community but also delved into the collaborative initiatives fostered in conjunction with ICFOSS (International Centre for Free and Open Source Software). Attendees were treated to a detailed exploration of the multifaceted roles undertaken by the FLOSS Club within the campus ecosystem, with a particular emphasis on their alignment with ICFOSS's overarching objectives. Additionally, the session served as the launching pad for a membership drive, inviting enthusiastic participants to join the FLOSS Club and become actively involved in its endeavors. Through engaging presentations and interactive discussions, participants gained a comprehensive understanding of the diverse array of activities and initiatives spearheaded by both entities. From promoting open-source software development to nurturing a vibrant culture of collaboration and innovation, attendees emerged with a nuanced appreciation for the profound impact of the FLOSS Club and ICFOSS on campus life.



ICFOSS
LBS COLLEGE OF ENGINEERING
KASARAGOD
(A GOVT. OF KERALA UNDERTAKING)

FLOSS CLUB

STAFF COORDINATOR
Dr. SARITH DIVAKAR
99467 60222

STUDENT COORDINATOR
ABHINAV KM:
7736987972

MEMBERS CALL FOR FLOSS CLUB LBS

ABOUT US

THE FLOSS CLUB AT LBS COLLEGE OF ENGINEERING WAS INTRODUCED IN 2016 TO PROMOTE OPEN-SOURCE SOFTWARE'S IMPORTANCE AS ACADEMIC TOOLS. IT FOCUSES ON MENTORSHIP, ENCOURAGING CONTRIBUTIONS TO OPEN-SOURCE PROJECTS, AND HOLISTIC STUDENT DEVELOPMENT THROUGH TECHNICAL AND EXTRACURRICULAR ACTIVITIES.

Python for Machine Learning

On October 6, 2023, Dr. Sarith Divakar M led an exhilarating hands-on session titled "Python for Machine Learning" at the SDPK Lab, LBS College of Engineering, Kasaragod. This event garnered significant excitement and anticipation among attendees, promising an immersive exploration of Python's applications in the realm of machine learning. This session served as a precursor event for the upcoming 3-day residential program in Machine Learning through Python, organized by ICFOSS at Central University, Kasaragod. Particularly noteworthy was its inclusion as part of the Gender and Technology initiative, demonstrating ICFOSS's commitment to fostering diversity and inclusion in the tech industry.

Attendees, comprising registered residential program students, were treated to a comprehensive and interactive session that delved into the fundamentals of Python programming tailored specifically for machine learning applications. Dr. Sarith Divakar M expertly guided participants through practical exercises and real-world examples, equipping them with the foundational skills and knowledge necessary to embark on their journey into the exciting field of machine learning. The event proved to be a resounding success, providing attendees with invaluable insights and hands-on experience that will undoubtedly serve as a solid foundation for their further exploration of machine learning technologies. As participants departed the session, they were left inspired and empowered, eagerly anticipating the forthcoming residential program and the opportunities it holds for further growth and learning.

Participants list:

Name	Roll Number	Department
Hawwa Rafiya	31	CSE
Hana Shameer	28	CSE
MALAVIKA K	41	CSE
Rukiya hibha b.k	26	IT
Archana Das A	16	CSE
SREEJITH	60	CSE
P Aliya Sana	23	IT
Jyothika J	33	CSE
Mariyamath Fahida	15	EEE
Samha Zubair	55	CSE

Ashitha K	16	CSE
Kadeejath Fidha I	16	IT
Ayshath Nafia KM	20	CSE
Khadeejath Mursheeda k	21	CSE
Fathima Basheer MTP	24	CSE
SRIJITH K	61	CSE
Sivanand S	56	CSE
Kripa. P	36	CSE
JACOB GEORGE	24	CSE
SRINIVAS	62	CSE

Feedback:

Do you have any other feedback/suggestions?
Good experience
Good
It was a very well explained . As a beginner in programming i found difficult to understand the online session
It was a good session. I got more knowledge about python.
It was an amazing session on basics of python. I could recall the basics and the volunteers also helped a lot. The slides and the colab notes which was presented there was catchy, and easily understandable. Kudos to sarith sir, as he handled the session very neatly and beginner friendly.looking forward for another session on the same so that we could understand the topics that wasn't completed in that session.
Very useful
It was a wonderful session and was able to learn python basics which will be helpful for machine learning
It was a great experience learning python from a trainer who is very friendly and gives an opportunity to every trainee to learn and enjoy the session. The course was completed with best examples that could be provided. Thank you.
The class was really good. I gained a lot of new knowledge. Would like to attend more of these classes hopefully in the future
It was an amazing class. I've got clarity on what python is. The basics sir taught were crystal clear. Now i'm interested in knowing more about python language. The way sir taught us was the thing i liked the most(making us to do basics of coding by using that website)
It was interesting and i got to know more about python
Very useful session 🖱
Very helpful session
A class that provide basic knowledge of python taken by sarith sir is very much useful for me
It was an informative session
As a tech enthusiast, the session was valuable and insightful, enhancing my understanding.
Great class.expecting more classes like this
It's a very nice experience. Thank you for this opportunity
Nice class covered some more interesting topics related to python
It was an very informative and good session .it helped me to revise my python basics

PRECURSOR EVENT ICFOSS

PYTHON FOR MACHINE LEARNING

**3-DAY RESIDENTIAL PROGRAM
IN MACHINE LEARNING
ORGANIZED BY ICFOSS AT
CENTRAL UNIVERSITY
KASARAGOD AS A PART OF
GENDER AND TECHNOLOGY
INITIATIVE**

**6th
October**



Venue: SDPK LAB
Spot Registration

 **7034906627**
ABHINAV KM

Dr. Sarith Divakar M
Assistant Professor CSE

FLOSS  LIBSCEK



CHAPTER 3

FACULTIES/STUDENTS INTERACTIONS

Sl. No.	Date	Name of the Programme
1	12-08-2023	Freedom Fest 2023
2	25-10-2023 & 26-10-2023	ICFOSS Visit
3	22-2-2024 To 24-2-2024	3-day residential program at Central University Kasaragod

Freedom Fest 2023

Abhinav KM and Kalidas MB, both students from the Computer Science and Engineering (CSE) department in their seventh semester (2020-24), represented our institution at the Freedom Fest 2023. The Freedom Fest aimed to congregate Academicians, Practitioners, Stakeholders, and Students of Kerala to explore inclusivity and access in the formation of a knowledge society, with a focus on employment generation and social progress in the state. The event spanned four days, from August 12th to August 15th, 2023.

Abhinav KM and Kalidas MB actively participated in the event, engaging in discussions, networking with fellow attendees, and contributing insights from our institution. Their presence at the Freedom Fest underscores our commitment to promoting student involvement in initiatives aimed at societal progress and academic discourse. We commend Abhinav KM and Kalidas MB for their participation and representation at the Freedom Fest and look forward to their continued engagement in such meaningful events.



**Free/Libre Open Source software
(FLOSS) Club**
LBS College of Engineering
(A Government of Kerala Undertaking)
Povval, Muliya PO, Kasaragod 671542, Phone No:04994 250290
iedc@lbscek.ac.in



F.NO : 1/8/2023

Date: 8-Aug-2023

Following student (Chief FOSS Ambassador) is nominated for attending Freedom Fest 2023 at Trivandrum from 12th August 2023 to 15th August 2023.

Abhinav KM CSE S7 2020-24 abhinavkm627@lbscek.ac.in 7736997972

Kasaragod

Dr. Sarith Divakar M

8-Aug-2023

FOSS Cell Coordinator



**Free/Libre Open Source software
(FLOSS) Club**
LBS College of Engineering
(A Government of Kerala Undertaking)
Povval, Mullyar PO, Kasaragod 671542, Phone No:04994 250290
iedc@lbscek.ac.in



F.NO : 2/8/2023

Date: 9-Aug-2023

Following student is nominated for attending Freedom Fest 2023 at Trivandrum from 12th August 2023 to 15th August 2023.

Kalidas MB CSE 57 2020-24 kalidasmb11@gmail.com 9497799167

Kasaragod

Dr. Sarith Divakar M

9-Aug-2023

FOSS Cell Coordinator

ICFOSS Visit

The visit to ICFOSS in Trivandrum was undertaken as part of the students' B.Tech main project. The objective was to seek guidance and techniques for completing the project, with a focus on utilizing Natural Language Processing (NLP) techniques. During the visit to ICFOSS on October 25-26, 2023, students had the opportunity to engage with experts in the field of Natural Language Processing. The team comprising Kalidas MB, Jishnu U, Manjukesh U S, Arathy V, and Arya P R actively participated in discussions and knowledge-sharing sessions. The experts at ICFOSS provided valuable insights into various NLP techniques and methodologies that could be employed for the students' project. They guided students through the process of project planning, data acquisition, preprocessing, model selection, training, and evaluation. Additionally, they offered practical advice on overcoming challenges commonly encountered in NLP projects and recommended best practices for effective project management.




The visit proved to be highly beneficial, as it equipped students with the necessary guidance and tools to advance their B.Tech main project using NLP techniques. Students express their gratitude to the team at ICFOSS for their expertise and support, which will undoubtedly contribute to the successful completion of their project. Moving forward, students are committed to implementing the knowledge gained during the visit and leveraging NLP techniques to develop innovative solutions as part of their project.

Date of Visit: **October 25-26, 2023**

Location: **ICFOSS, Trivandrum**

Participants:

- Kalidas MB (KSD20CS061)
- Jishnu U (KSD20CS057)
- Manjukesh U S (KSD20CS063)
- Arathy V (KSD20CS023)
- Arya P R (KSD20CS026)

 Free/Libre Open Source software (FLOSS) Club LBS College of Engineering (A Government of Kerala Undertaking) Povval, Muliya PO, Kasaragod 671542, Phone No:04994 250290 iedc@lbscek.ac.in		
F.NO : 1/10/2023	Date: 18-Oct-2023	
I request you to give permission for the following students to visit ICFOSS, Trivandrum on 25-26 Oct 2023 to discuss their NLP-based Malayalam Sign language work.		
Kalidas MB (KSD20CS061) CSE B Jishnu U (KSD20CS057) CSE B Manjukesh U S (KSD20CS063) CSE B Arathy V (KSD20CS023) CSE A Arya P R. (KSD20CS026) CSE A		
Kasaragod 18-Oct-2023	 Dr. Sarith Divakar M FOSS Cell Coordinator	

3-day residential program at Central University Kasaragod

Students from the S2 Computer Science Engineering (CSE) batch participated in the Residential Program held at Central University Kasaragod from February 22nd to February 24th, 2024. The program was organized by ICFOSS as part of the Gender and Technology initiative, aimed at empowering and educating girl students in the field of technology. During the program, Archana Das A, Reshmi Rajan M, Neenu Josey, and Anagha A actively engaged in various workshops, seminars, and hands-on activities focused on enhancing their knowledge and skills in technology. They demonstrated exemplary enthusiasm, dedication, and participation throughout the duration of the program.

The students had the opportunity to interact with experts in the field, collaborate with peers from other institutions, and gain valuable insights into emerging technologies and industry trends. The program provided them with a conducive learning environment and invaluable networking opportunities. Their participation in the Residential Program reflects their commitment to personal and professional development, as well as their proactive approach to seizing opportunities for learning and growth.

We commend Archana Das A, Reshmi Rajan M, Neenu Josey, and Anagha A for their active participation and representation of our institution at the Residential Program. We are confident that the knowledge and experiences gained during the program will greatly contribute to their academic and professional journey. Moving forward, we encourage and support our students to continue participating in such initiatives and leveraging opportunities to expand their horizons and enhance their skills.

Date: **February 22nd - February 24th, 2024**

Location: **Central University Kasaragod**

Participants:

- Archana Das A
- Reshmi Rajan M
- Neenu Josey
- Anagha A

F.NO : 1/2/2024

Date: 21-Feb-2024

Following students are nominated for attending 3-day residential program organized by ICFOSS (International Centre for Free and Open Source Solutions) at Department of Computer science, Central University, Kasaragod, scheduled to be held from 22nd to 24th February 2024..

1. Archana Das A, S2 CSE
2. Reshmi Rajan M, S2 CSE
3. Neenu Josey, S2 CSE
4. Anaiha a, S2 CSE



Kasaragod
21-Feb-2024

Dr. Sarith Divakar M
FOSS Cell Coordinator



CHAPTER 4

CONCLUSION

Throughout the academic year 2023-24, the FLOSS Club has orchestrated multiple successful events, with our greatest achievement lying in the profound impact on new students. Our team takes pride in guiding the dreams and aspirations of many students toward the right path. While acknowledging past shortcomings, we have diligently rectified them and ensured that future teams learn from our experiences. We eagerly anticipate witnessing their endeavors and contributing to their success.

CHAPTER 5

CONTACT

Official Email Address – floss@lbscek.ac.in

Official Website - <https://lbscek.ac.in/iedc/>

FLOSS Club Coordinator - Dr. Sarith Divakar M – sarith@lbscek.ac.in 9946760222

Student Ambassador – Abhinav K M - abhinavkm627@lbscek.ac.in 7736997972



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Innovation & Entrepreneurship Development Centre (IEDC)



LBS College of Engineering, Kasaragod

FLOSS Student Community Members 2022-23

Sl. No	Name	Execom Role
1	Varun Vinay	Student Coordinator
2	K K Sukanya	Women Hackathon Coordinator
3	Sreenivas Pai	Member
4	Jarosh Antony	Member
5	Abhishek Gopal	Member
6	Ashik M	Member

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CHAPTER 1

INTRODUCTION

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CHAPTER 2

EVENTS ORGANISED

Sl. No.	Date	Name of the Programme
1	4-11-2022	Machine learning application development workshop Part 1
2	18-11-2022	Machine learning application development workshop Part 2
3	25-11-2022	Hadoop in Google Cloud Platform
4	28-11-2022 & 29-11-2022	Workshop on Python programming

Machine learning application development workshop Part 1

The Machine Learning Application Development Workshop Part 1 is an initiative aimed at equipping participants with practical knowledge and skills in machine learning (ML) application development. Hosted at the SDPK LAB, this workshop is organized by the collaborative efforts of the Innovation and Entrepreneurship Development Cell (IEDC) and the Institution's Innovation Council (IIC). Sarith Divakar M, the facilitator and FLOSS Club coordinator, commenced the workshop with an insightful introduction to machine learning. The session covered fundamental concepts such as supervised and unsupervised learning, classification, regression, and clustering. Participants gained a clear understanding of the basics of ML. Following the theoretical introduction, participants engaged in hands-on learning sessions. Practical exercises and demonstrations were conducted to teach attendees how to implement ML algorithms using popular Scikit-learn framework. This segment allowed participants to apply theoretical knowledge in real-world scenarios. The workshop explored various real-world applications of machine learning, providing participants with valuable insights into how ML is used in natural language processing, image recognition, recommendation systems, and predictive analytics. Case studies and examples were shared to illustrate the practical relevance of ML in different domains.



Instagram: <https://www.instagram.com/p/CkbhPdWy2UU>

Machine learning application development workshop Part 2

The Machine Learning Application Development Workshop Part 2, focusing on Deep Learning, took place on November 18, 2022, at the SDPK LAB. The workshop was meticulously organized by the Innovation and Entrepreneurship Development Cell (IEDC) and the Institution's Innovation Council (IIC), aiming to provide participants with a comprehensive understanding of deep learning concepts and their practical applications.

Workshop Highlights:

Sarith Divakar M commenced the workshop with an in-depth exploration of deep learning fundamentals. Participants were introduced to neural networks, activation functions, backpropagation, and other essential concepts that form the backbone of deep learning algorithms.

Hands-on Sessions: The workshop featured hands-on sessions where participants had the opportunity to implement deep learning algorithms using frameworks such as TensorFlow and Keras. Practical exercises and

coding demonstrations enabled attendees to gain practical experience in building and training neural networks for various applications.

Advanced Deep Learning Techniques: In addition to covering basic concepts, the workshop delved into advanced deep learning techniques. Topics such as convolutional neural networks (CNNs) for image recognition, recurrent neural networks (RNNs) for sequence data, and generative adversarial networks (GANs) for image generation were discussed, providing participants with a deeper understanding of the diverse applications of deep learning.

Real-world Applications: The workshop emphasized the practical applications of deep learning across various domains. Case studies and examples were shared to showcase how deep learning is used in areas such as computer vision, natural language processing, healthcare, and finance. Participants gained insights into how deep learning algorithms are transforming industries and solving complex problems.

Project Development: A significant portion of the workshop was dedicated to project development. Participants worked on mini-projects, applying the concepts learned during the workshop to solve real-world problems or develop prototype deep learning applications. Mentors provided guidance and support to help participants navigate the project development process.

Conclusion:

The Machine Learning Application Development Workshop Part 2 - Deep Learning was a resounding success, providing participants with valuable knowledge and practical skills in deep learning. Through theoretical sessions, hands-on exercises, advanced techniques exploration, real-world applications, and project development, attendees gained a comprehensive understanding of deep learning concepts and their practical implementation. The workshop not only enhanced participants' technical capabilities but also fostered collaboration and networking among like-minded individuals interested in deep learning and its applications.



L.B.S College of Engineering
(A Govt. of Kerala Undertaking)



Instagram: <https://www.instagram.com/p/Ckqxp-jyODH/>

Introduction to Hadoop on Google Cloud Platform

The "Introduction to Hadoop on Google Cloud Platform" workshop, organized by IEDC, was expertly conducted by Amulya S J, Athira C, and Sreeradha M. Their combined knowledge and expertise in the field provided participants with an enriching learning experience, guiding them through the fundamentals of Hadoop and its implementation on Google Cloud Platform (GCP). The event featured discussions, practical demonstrations, and hands-on activities to familiarize attendees with the key concepts and tools involved. The workshop began with an introduction to Hadoop, emphasizing its role in processing and analyzing large datasets. Concepts such as Hadoop Distributed File System (HDFS) and MapReduce were explained to provide a foundational understanding. Following the Hadoop overview, the focus shifted to GCP and its services relevant to Hadoop deployments. Real-world case studies and examples were presented to illustrate the use of Hadoop on Google Cloud Platform across various industries and applications. Attendees gained insights into

how organizations leverage these technologies to derive actionable insights from their data.

Conclusion:

The session conducted by Amulya S J, Athira C, and Sreeradha M provided participants with a solid foundation in Hadoop and its implementation on Google Cloud Platform. Their expertise, coupled with engaging delivery and interactive elements, ensured that attendees gained practical skills and valuable insights to apply in their professional endeavors.



The poster features the L.B.S College of Engineering logo at the top center, which includes a circular emblem with a book and a gear. Below the logo, the text reads "L.B.S College of Engineering (A Govt. of Kerala Undertaking)". The main title "Workshop on HADOOP IN GOOGLE CLOUD PLATFORM" is displayed in a mix of white and blue fonts against a dark background with faint social media icons. The speakers' names "AMULYA S J, ATHIRA C, SREERADHA M" are listed below the title. The date and time "25 NOV, 2022 2 PM" and the location "SDPK LAB" are enclosed in a white-bordered box. At the bottom, three logos are shown: the Institution's Innovation Council (Ministry of HRD Initiative), the Innovation and Entrepreneurship Development Centre, and the IDC (Innovation and Entrepreneurship Development Centre, LBS College of Engineering, Kerala).

Instagram: <https://www.instagram.com/p/CIQKCwgy4ju>

Workshop on Python programming

The workshop on Python programming, held on the 28th and 29th of November 2022, was a collaborative effort between the Innovation and Entrepreneurship Development Cell (IEDC) and the Electronics and Communication Engineering (ECE) Department. Its primary objective was to equip participants with a comprehensive understanding of Python programming language, its applications, and practical implementation.

Session 1: Introduction to Python

Mr. Sharath Kumar K initiated the workshop with an introductory session on Python programming language. He covered the basic syntax, data types, and control structures in Python. Participants were given hands-on exercises to familiarize themselves with Python code writing and execution.

Session 2: Advanced Python Concepts

Ms. Fathima Zulfa delved into advanced concepts of Python programming. Topics included functions, modules, file handling, and exception handling. Participants engaged in coding exercises to reinforce their understanding of the concepts discussed.

Session 3: Python Applications and Projects

Ms. Fathimath Nahida explored various applications of Python in real-world scenarios. She highlighted Python's significance in web development, data analysis, artificial intelligence, and machine learning. The session concluded with a discussion on potential project ideas utilizing Python.

Key Takeaways:

Participants gained a fundamental understanding of Python programming language, including basic and advanced concepts. Practical exercises enabled participants to apply their learning in real-time scenarios, enhancing comprehension. Insight into Python's applications across diverse fields provided participants with a broader perspective on its relevance and significance.

Conclusion:

The workshop on Python programming organized by IEDC in association with the ECE Department proved to be an insightful and enriching experience for all participants. Through engaging sessions and hands-on activities, attendees acquired valuable skills and knowledge essential for leveraging Python in various domains. Such initiatives play a pivotal role in fostering technological proficiency and innovation among students.



LBS COLLEGE OF ENGINEERING KASARAGOD 

ASSOCIATION OF ECE 2021-22

Innovation and Entrepreneurship
Development Centre
LBS College of Engineering Kasaragod

IN ASSOCIATION WITH

INNOVATION AND ENTREPRENEURSHIP DEVELOPMENT
CENTER LBS COLLEGE OF ENGINEERING KASARAGOD

2 DAY WORKSHOP ON
'PYTHON PROGRAMMING'
ON 28TH AND 29TH NOVEMBER, 2022



CLASSES HANDLED BY
SHARATH KUMAR K (S7 IT)
FATHIMA ZULFA (S7 IT)
FATHIMATH NAHIDA (S7 IT)

CHAPTER 3

CONCLUSION

During the year 2022-23, the FLOSS Club organized many successful events in association with IEDC and IIC. Our biggest accomplishment was helping new students feel a positive difference. We are happy to guide many students towards their goals. We fixed past mistakes and made sure future teams learn from them. We're excited to see what they achieve and how we can help them succeed.

CHAPTER 4

CONTACT

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LBS College of Engineering, Kasaragod

Activity Report 2021-22
Free/Libre Open Source Software (FLOSS) Club
&
Free/Libre Open Source Software (FLOSS) Student Community, IEDC

Vision of the Institute

To become a paragon institution for pursuance of Education and Research in Engineering and Technology

Mission of the Institute

- *Impart finest quality Technical Education and Training*
- *Nurture a vision of Sustainable development*
- *Bequeath it to the next generation of professionals*



Innovation & Entrepreneurship Development Centre (IEDC)



LBS College of Engineering, Kasaragod

FLOSS Student Community Members 2021-22

Sl. No	Name	Execom Role
1	Varun Vinay	Student Coordinator
2	K K Sukanya	Women Hackathon Coordinator
3	Sreenivas Pai	Member
4	Jarosh Antony	Member
5	Abhishek Gopal	Member
6	Ashik M	Member

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CHAPTER 1

INTRODUCTION

The International Centre for Free and Open Source Software (ICFOSS) is an autonomous organization established by the Government of Kerala, India. It has a dual mandate: to promote the universal use of Free and Open Source Software (FOSS), consolidate early FOSS initiatives in Kerala, and foster collaboration with various nations, communities, and governments to advance FOSS globally. Under ICFOSS's guidance, LBS College of Engineering, Kasaragod, initiated the FLOSS (Free/Libre Open Source Software) Club in 2016. The club aims to underscore the importance of open-source software and its utility as academic tools.

Objectives of the FLOSS Club

- **Promoting Awareness:** Raise awareness about the benefits and importance of Free and Open Source Software among students, faculty, and the broader community.
- **Education and Training:** Provide education and training opportunities related to FOSS technologies, tools, and practices, through workshops, seminars, and tutorials.
- **Community Building:** Foster a sense of community among students and enthusiasts interested in FOSS, providing a platform for collaboration, knowledge sharing, and networking.
- **Contributions to FOSS Projects:** Encourage members to contribute to FOSS projects, either by coding, documentation, testing, or other forms of involvement, thereby promoting a culture of contribution and giving back to the FOSS community.
- **Advocacy:** Advocate for the adoption of FOSS in academic institutions, businesses, and government organizations, highlighting its advantages in terms of cost, flexibility, security, and innovation.
- **Support for FOSS Initiatives:** Support initiatives aimed at promoting and advancing FOSS locally and globally, including participation in FOSS events, conferences, and hackathons.

- **Skill Development:** Provide opportunities for members to develop technical skills, leadership abilities, and project management capabilities through hands-on involvement in FOSS-related activities.
- **Collaboration:** Collaborate with other FOSS clubs, organizations, and communities regionally, nationally, and internationally to exchange ideas, resources, and best practices.
- **Open Source Advocacy:** Advocate for policies and practices that promote openness, transparency, and collaboration in software development and distribution.
- **Innovation:** Encourage innovation and creativity in the development and use of FOSS, exploring new technologies and approaches to address emerging challenges and opportunities.

The FLOSS (Free Libre Open Source Software) Club conducts a diverse array of programs to promote the adoption, understanding, and contribution to open-source software. These initiatives encompass workshops covering various facets of FOSS, seminars featuring industry experts and academic leaders, hackathons fostering collaborative problem-solving and project development, and training sessions aimed at enhancing members' technical proficiencies within the FOSS domain. Additionally, the club hosts contributor days to facilitate direct involvement in FOSS project contributions, organizes open-source software demonstrations to showcase practical applications, and advocates for FOSS adoption through community-building activities and participation in advocacy events. Through these multifaceted programs, the FLOSS Club fosters a vibrant community of enthusiasts, empowers skill development, and cultivates a culture of innovation and collaboration within the FOSS ecosystem.

CHAPTER 2

EVENTS ORGANISED

Introduction to Arduino

The Introduction to Arduino workshop was conducted on December 11, 2021 organized jointly by IEDC LBSCEK and IEEE LBSCEK. The workshop aimed to provide participants with a foundational understanding of Arduino, an open-source electronics platform widely used for prototyping and DIY projects. The workshop commenced with an opening address by Sreenivas Pai, CEO of IEDC, providing context for the importance of Arduino in the realm of innovation and technology. Following this, Abhishek Gopal, an experienced member from the S5 CSE program, led the workshop sessions.

The workshop covered the following key topics:

- Introduction to Arduino: Overview of Arduino boards, IDE, and programming language.
- Arduino Programming: Basics of writing code for Arduino projects, including syntax and functions.
- Circuitry Essentials: Understanding electronic components and circuit design for Arduino projects.
- Hands-On Activities: Participants engaged in practical exercises to reinforce learning, such as building simple circuits and programming basic functionalities.

The Introduction to Arduino workshop concluded with a closing remark by the facilitators, encouraging participants to continue exploring Arduino and apply their newfound knowledge in personal and academic projects. Certificates of participation were distributed to all attendees.





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