



ALVA'S INSTITUTE OF ENGINEERING & TECHNOLOGY

(Unit of Alva's Education Foundation (R), Moodbidri)

Affiliated to Visvesvaraya Technological University, Belagavi &

Approved by AICTE, New Delhi. Recognized by Government of Karnataka.

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DEPARTMENT HACKATHON REPORTS -2023-24

HACKATHON REPORT - 2023-24



ALVA'S INSTITUTE OF ENGINEERING & TECHNOLOGY



Ai²
FORUM

DEPT. OF ARTIFICIAL INTELLIGENCE
AND MACHINE LEARNING

PRESENTS

FUSION TECHATHON

BREAK, BLEND & BUILD

PRIZE POOL UPTO 40K

REGISTER NOW !!!

DOMAIN: AIML, WEB & IOT

🕒 **SEPTEMBER 2ND , 2023**

📍 **AIET, MIJAR , MANGALURU**

EXPOSURES:

- UNLEASH YOUR CREATIVITY, CODE YOUR DREAMS, AND ENGINEER THE FUTURE WITH US.
- DIVE INTO THE CUTTING-EDGE TECH LANDSCAPE, SOLVE REAL-WORLD CHALLENGES
- SHOWCASE YOUR SKILLS TO INDUSTRY EXPERTS.

FOR ANY QUERIES PLEASE CONTACT :

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SCAN TO REGISTER



FEEL FREE TO REACH US AT
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Shobhavana Campus, MIJAR-574225, Moodbidri, D.K., Karnataka

Ph: 08258-262725; Mob: 722262724, 7026262725, mail: principalaiet08@gmail.com

Department of Artificial Intelligence & Machine Learning

To

Date 21/08/2023

IQAC Chairman

AIET, Mijar

Respected Sir

Sub: Request for permitting us to conduct Hackathon - Reg

With reference to the above cited subject, we are happy to organize 1 day

Hackathon on 2nd September 2023. Kindly request you do the needful.

21/08/2023



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Report on "Fusion Techathon"

Department of Artificial Intelligence and Machine Learning in association with Student Forum AI² organized a one day(12- hour) Hackathon – "Fusion Techathon" in Alva's Institute of Engineering and Technology on 2nd September 23.

The Program was started by lighting the lamp. The program was inaugurated by Mr. Mahabala S Bhandary, Ex- Senior Manager, IBM. During the inauguration program Mr. Vivek Alva, Managing Trustee, AEF, our beloved principal Dr. Peter Fernandes and HOD of AIML Prof. Harish Kunder were present. Also the Mr. Nikhil, President and Mr. Yashwanth, Vice-President of student forum were present.

The event commenced with great enthusiasm and anticipation as the esteemed chief guest, Mr. Mahabala S Bhandary, took the stage to deliver an inspiring address. Mr. Mahabala S Bhandary expressed deep gratitude for being invited to be a part of this remarkable event. During his address, the chief guest articulated several significant concepts aimed at guiding students in their consideration of future career paths. Of particular note was his assertion that students should proactively seek experiences that lie beyond their comfort zones, as doing so fosters a broader and more comprehensive understanding of knowledge, transcending the boundaries of traditional academic content. Supported by his extensive expertise and personal narratives, the chief guest delivered an inspirational discourse that resonated deeply with the students, enlightening them and leaving an indelible impression.





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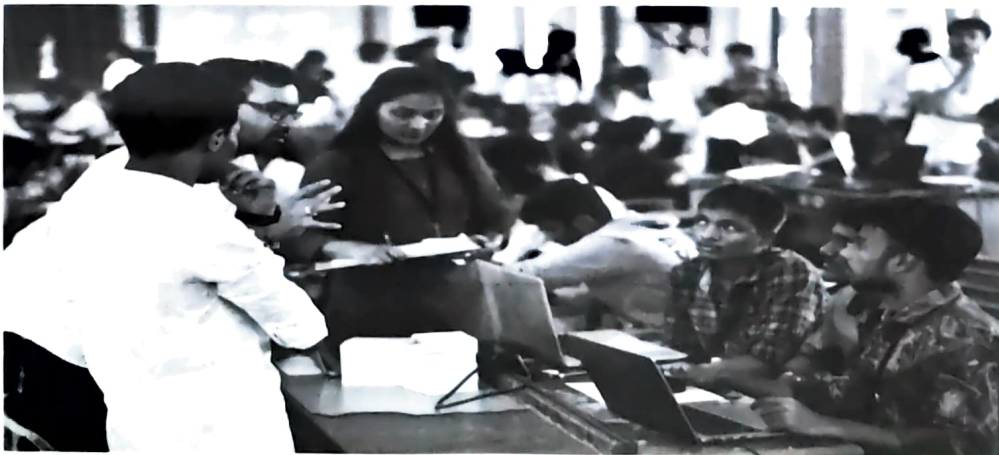
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From 14 different colleges, total 136 students from all over Karnataka were participated in the Hackathon. Overall, 41 teams were registered for this event and around 36 teams were actively participated in this program.

For the Fusion Techathon the Jury Panel were Mr. Jaison Lawrence Dias, Niveus Solutions, Mr. Reuel Lobo -Niveus solutions and Mr. Rakesh N Chowdhury – Proud alumni of Alvas.

The Hackathon were conducted mainly on three fields AIML, IOT and Web Design. The participants were given the problem statement on the above-mentioned fields to find a creative solution. The participants were participated very actively throughout the program. Lots of creative ideas, models came up in this program which can be useful to society in future.





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Valedictory Program was conducted with the Presence of Dr. Durgaprasad Baliga, Dean-Student Affairs, AIET and HOD of AIML Prof. Harish Kunder along with Forum bearers.

First Prize won by the team HEISENBERG from SJEC, Mangalore of worth Rs. 15K. Second prize won by team VEGSHELL from AJIET, Mangalore of worth Rs. 10K and Third prize won by team SYNTHETIX from PACE, Mangalore of worth Rs. 5K. And participation certificates given to all the participants.



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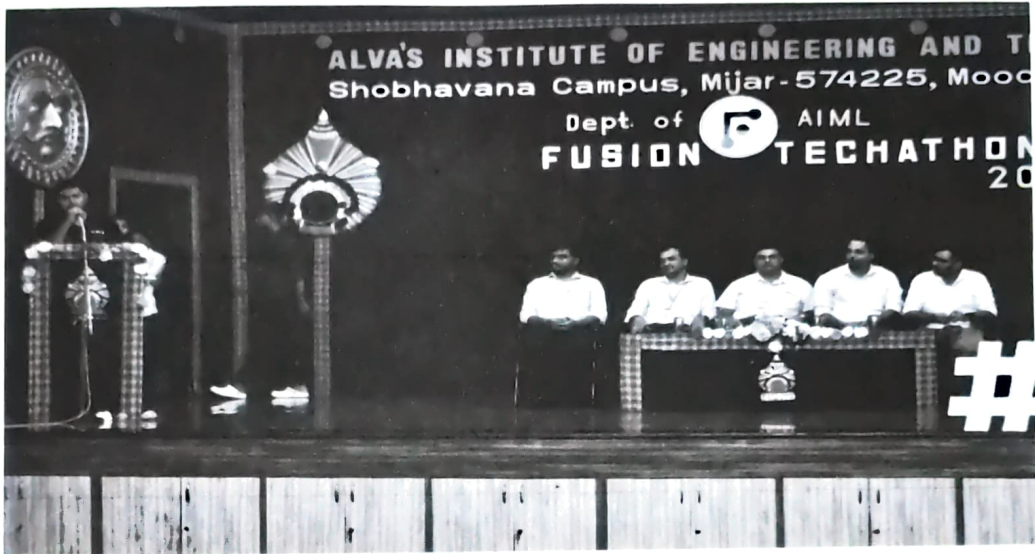
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Outcome:

The outcome of this Hackathon is to make the student to expose to the real-world problems and they will find a solution to the problem under the time constraint. Through this program students of AIET got good knowledge about Hackathon and how to participate in such events in future.

K.H. 02/09/2023
Head of the Department
Dept. of Artificial Intelligence & Machine Learning
Alva's Institute of Engineering and Technology
Shobhavana Campus, Mijar
Moodubidire 574 225, D.K. Karnataka, India

FUSIONTECHATHON-2023

PROBLEM STATEMENTS

Rules

- Each team should choose any one domain from AIML, IoT and Web Development.
- Each team should choose one problem statement from chosen domain and build an efficient and feasible solution for it.
- Solution must be a working Model.
- No re-use of existing models or prototypes or codes are allowed in case of any plagiarism found, such team will be disqualified from the event.
- No restriction in using open-source tools or platforms, usage of paid or cracked version tools are not allowed.

AIML

1. Create a machine learning system that analyses medical images (X-rays, MRIs) and provides preliminary diagnoses to assist healthcare professionals, implement an AI-driven chatbot that provides medical information and recommendations based on user symptoms, promoting health awareness.
2. Design an AI-powered application that translates messages in real time, enabling users to communicate seamlessly across languages.
3. Design a model that predicts crop yields based on data like weather patterns, soil quality, and farming practices, assisting farmers in making informed decisions.
4. Develop an AI system that assists teachers in managing classrooms by analysing student engagement, mood, and performance, offering insights for improved teaching strategies.
5. Create a virtual platform that allows users to visualize how different makeup products or clothing items would look on them using augmented reality and AI.

Web Development

1. Develop a platform that connects local farmers, food producers, and consumers interested in sustainable and locally sourced food. Include features for ordering, delivery, and education on sustainable food practices.
2. Build a Web app that can detect emotions from text-based online communication (e.g., social media posts, emails) to help identify cyberbullying, mental health issues, or provide sentiment-based insights.
3. Create a collaborative web application for project management that includes features like task assignments, progress tracking, file sharing, real-time communication, and the ability to generate performance analytics.

FUSIONTECHATHON-2023

4. Design a user-friendly web application that integrates Internet of Things (IoT), Artificial Intelligence and Machine Learning (AIML) technologies to control and automate various aspects of a smart home environment.
5. Develop a user-friendly web platform connecting volunteers and organizations. Enable volunteers to register, search for causes, and sign up for events. Allow organizations to post opportunities, communicate with volunteers, and receive reviews, fostering impactful societal engagement.

IoT

(No Components will be provided)

1. Build a network of IoT sensors to monitor air pollution levels in different parts of a city and display the data on a user-friendly web dashboard.
2. Create a wearable IoT device that continuously monitors vital signs and alerts users and caregivers in case of abnormalities.
3. Design educational tools that provide visually impaired students with access to digital learning materials, interactive activities, and braille integration, ensuring a more inclusive educational experience.
4. Design an algorithm that utilizes sensor data from machinery to predict when maintenance is needed, helping businesses reduce downtime and optimize maintenance schedules.
5. Develop a smart trash bin using IoT sensors to measure fill levels. Incorporate AI to predict efficient collection times. Create a simple web interface for real-time monitoring and optimized waste management.

Additional Problem Statements:- (Any Technologies can be applied for building solution for these problems)

- Grievance management system - people can share complaints about the government services. They can raise a complaint about bad roads, water supply, traffic, electricity etc. They can upload pictures, videos, audio messages or text and the system should identify the govt department that needs to be assigned to. There should also be an application for the govt departments to respond and update the status.
- Intelligent Fleet Management System - The system should be a modular application that will be used by bus operators (ksrtc, msrtc, etc..) or truck operators (VRL, ekart, delhivery etc...) to optimize their bus stop and warehouse locations. There should be a dashboard where they will be able to manage their different bus station maps and parking areas. They should also be able to manage their fleet to identify buses, their timings, routes, drivers etc. There should also be an app for drivers, telling them where their buses or trucks need to be entered, parked or leave. In a nutshell, this should optimize the usage of their real estate as well as their Assets.

Note:

The best solution across all three domains wins.

Certificates will be given to all the participants.

Pro-Tip:

Choose the problem statement in which you have proper knowledge, Apply Break, Blend & Build methodology.

ALL THE BEST



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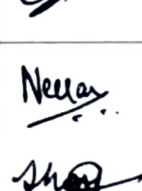

FUSION TECHATHON REGISTRATION FORM


SI.NO	TEAM NAME	TEAM MEMBERS	PH.NO	COLLEGE	DOMAIN	SIGNATURE
1.	2 TECHSYNERGY	1.MANSUR JAVID 2.LESTER FERNANDES 3.LEVIN 4.NISHANYE	7338469603 9865204591 974093282	SJEC,VAMNJOOR	WEB DESIGN	Mansur Lester Levin Nishanye
2.	3 CLUELESS CODERS	1.SHRI DHATHRI P.M 2.KEERTHANA M 3.NISARGA S 4.TANGEVVA R	6362925156 6363343477	AIET,MIJAR	WEB DESIGN	Nisarga Keertana Tangevva
3.	4 WEB CENTRIC	1.SHRAVYA S M 2.SREEJITH A 3.DARSHAN C M 4.DISHA M	9778216323 9555031402	AIET,MIJAR	WEB DESIGN	Shravya Sreejith Darshan Disha
4.	5 IKIGAI	1.M SAYEEM AHMED 2.KUSHAGR SHARMA 3.KARTHICK S SAIAN 4.SAMRUDH MANJA	9148137215 9106036377	NMAMIT,NITTE	WEB DESIGN	Kushagr Samrudh
5.	WE BEE DESIGN	1.G L SHREYA 2.CHAYA 3.LAVANYA N MOGER 4.NISHMITHA S SHETTY	7483906490	AIET,MIJAR	WEB DESIGN	
6.	1 TEAM VEGSHELL	1.DEVIPRASAD RAI P 2.DHRUV K SHETTY 3.S ATHREYA SHANKAR 4.PRATEEK C KOTIAN	9113624552	A.J INSTITUTE OF ENGG,MANGALORE	WEB DESIGN	Deviprasad Dhruv Sathreya Prateek
7.	23 INFINITY	1.ANSIL KUMAR 2.RAVITEJ 3.ABHISHEK ALLAPUR	9622030738 935163880	AIET,MIJAR	WEB DESIGN	Ansil Ravitej Abhishek

8.	DEV-DEN 9	1.PUNEET Y 2.ABHISHEK B 3.ABDUL RAHMAN 4.TEJAS D	6360981027	ADICHUNCHANGI RI COLLEGE CHIKAMAGALORE	WEB DESIGN	<i>Puneeth</i>
9.	HEISENBERG 33 I	1.AVEEN VAS 2.REEVAN COELHO	9108899106 8296314	SJEC,VAMNJOOR	AI&ML	<i>AB</i>
10.	CLASHERS 7	1.MANJUNATH M R 2.PRASHANTH B 3.YASHAS P 4.VARSHITH	8892889909	PES,MANDYA	AI&ML	<i>Yashas</i>
11.	HACKITECTS 34	1.SAMARTH Y R 2.GIRISH NAYAK	7760571629	AIET,MIJAR	AI&ML	
12.	INFINITY	1.PURUSHOTHAM N K	9008270715	RNSIT, BANGALORE	IOT	
13.	AVISHKARAH 8	1.HARSHIKA 2.GURUKIRAN P 3.SHREYAS NAIK 4.SAIKUMAR	9113540019	AIET,MIJAR	IOT	<i>Gr</i>
14.	VINYAS 24	1.VARUN BHARADWAJ M V 2.ULLAS B (YVCE) 3.SUJAY M N	8197911850	PES,MANDYA	WEB DESIGN	<i>G.V. Venkaj</i>
15.	CtrlAltDefeat 10	1.PUSHPESH KUMAR 2.LIMA DSOUZA 3.ANAGHA D S Adithi 4.MOIDEEN AADIL SHAN	9544872884	SAHYADRI, MANGALORE	AI&ML	<i>pushpesh kumar</i>
16.	THE CODE MAVERICKS 25	1.HARIKRISHNA 2.DHANUSHREE 3.YUVALAKSHMI	7899731279	MYSORE	WEB DESIGN	<i>Harikrishna</i>

17.	BYTE BRIGADE 26	1.DEETYA S SALIAN 2.ANANTHA KRISHNA 3.SARVAJITH ADYANTHAYA	7676680486	NMAM INSTITUTE OF TECHNOLOGY NITTE	WEB DESIGN	<i>Ankush</i>
18.	ERROR 11	1.MANJUNATH R 2.MANOJ M 3.SUJAY ADOOR 4.KISHOR U	7795347656	AIET,MIJAR	WEB DESIGN	<i>M.H.P Manoj Kishor</i>
19.	RUBIX CUBE 35	1.ADITYA V SHREENIVAS 2.LIKHITH T S 3. Sultan	9019755615	AIET,MIJAR	IOT	<i>AKS</i>
20.	CODIFIED 12	1.ISHA SHEIKH 2.PRATHVI DEVADIGA 3.SHARATH KUMAR 4.NISHANTH	8296602706	A J INSTITUTE OF ENGINEERING MANGALORE	WEB DESIGN	<i>Sharath</i>
21.	BYTEZEN 27	1.PRAMOD UPPOOR 2.GAURAV SHETTY 3.SUMANTH L	7975667147 7972690342 636213046	AIET,MIJAR	WEB DESIGN	<i>Pramod Gaurav Sumanth</i>
22.	IDEA TECH	1.ROHITH POOJARY 2.VAIBHAV KOTTARI 3.JESTAN DSOUZA	8861481967	SJEC,VAMNJOOR	WEB DESIGN	<i>Jestan</i>
23.	13 4i's	1.NASEER AHMED 2.VIKRAM POOJARY 3.P ANGINA PRABHU 4.POOJA V	8217490274	SMVIT,UDUPI	AI&ML	<i>Naseer Vikram Prabhu</i>
24.	14 AI ENCHANTERS	1.ANUSWAR 2.VARUN KUMAR 3.VIGNESH PRABHU 4.SMITHA PRABHU	6361185647	SMVITM,UDUPI	AI&ML	<i>Anuswar Varun Vignesh Smitha</i>
25.	15 AVINYA	1.M RAHUL BHAT 2.DEEKSHA DIVAKAR 3.SRIJAL 4.MADHUSHREE	9019721662	CANARA ENGINEERING BENJANAPADAVU	IOT	<i>Rahul Deeksha Srijal Madhushree</i>

26.	CONSTRAINT 27	1.PREETHAM 2.VIJETH FERNANDEZ 3.NIKHIL D'SOUZA	8618524411 914 7044 720 9902928211	SJEC,VAMANJOOR	WEB DESIGN	TDG TDG Arun
27.	16 BINARY BUDDIES	1.SATHWIK K D 2.DEEPAK R 3.SHUBHANG C S 4.GOWTHAM M A	8088158503	AIET,MIJAR	AI&ML	Yes Dy. Ak. C Shubh Gowtham
28.	TEAM NOTHING WSN	1.NIKHIL N KOTIAN 2.WEDSON 3.SONAL TOM	9353472169	ALVAS DEGREE COLLEGE MOODBIDRI	WEB DESIGN	Shal
29.	CHERRY MXGREEN 38	1.PRATHAM HARSHAVARDHAN DAVE 2.NIMISH MANGEE 3.KANISHK BAJPAI	7730814817	IIT,DHARWAD	AI&ML	Nimish
30.	DEV DREAM TEAM 3a Tech warriors	1.SHASHWATI	6362287376	AIET,MIJAR	WEB DESIGN	Shant
31.	JAHNAVI 39	1.JAHNAVI		AIET,MIJAR	IOT	Shiv
32.	15 CYPHER X	1.GOWTHAM P KINI 2.PRAJWAL S B 3.RAKSMITH RAO 4.SREEDEEP P	6282259552	AIET,MIJAR	IOT	
33.	17 ADVAYA	1.PRAJWAL R SUVARNA 2.ESHAAN SHETTY 3.LATHISH 4.SUJAY	8660796857	SUNDARI ANANDA,ALVA CAMPUS MOODBIDRI	WEB DESIGN	
34.	TEAM CHANGE MAKER ✓	1.NIVEDITHA G D 2.HARSHA K R 3.HEMALATHA H Y	6361407674	NIVKIS COLLEGE HASAN	WEB DESIGN	Niveditha Hemalatha Harshid

35.	BINARY WHISPERERS	1.RAMCHANDRA UDUPA 2.KRISHNA SHANBHAG 3.SIDHVIN SHETTY 4.SATWICK ACHARYA	9353867435	SMVITM,UDUPI	WEB DESIGN	
36.	SYNTHETIX	1.MUHAMMAD AJLAN 2.THAMEEM RAZ 3.MUNAZZA BEGAM 4.VARSHINI	6361557581	P.A MANGALORE	WEB DESIGN	
37.	TECH TURTLES	1.THANVI 2.UJWAL 3.CHAITANYA LAKSHMI 4.SHRAVYA JS	9481649432	CANARA ENGG,COLLEGE BENJANAPADAVU	IOT	
38.	TURBO MINDS	1.AHMAD THAMEEN 2.AFHAM AKRAM HASAN 3.ADUL MAUSOOQ 4.AAKIF MOHAMMAD	8867575821	P.A MANGALORE	WEB DESIGN	
39.	PACEMAKERS	1.MOHEMMAD AFTHAB 2.SHEIK RIFAZALI	9686246987	P.A COLLEGE OF ENGINEERING	WEB DESIGN	
40.	TECH WARRIORS	1.NEERAV V PATEL 2.TEJAS 3.ABHISHEK R G 4. Shashwathi	9620982415	AIET,MIJAR	WEB DESIGN	
41.	QU4D	1.MANVITH 2.MEGHANA 3.PADMAPOOJA 4.KARTHIK	6366298725	AIET,MIJAR	AI&ML	


 Head of the Department
 Dept. of Artificial Intelligence & Machine Learning
 Alva's Institute of Engineering and Technology
 Shobhavana Campus, Mijar
 Moodubidre 574 225, D.K. Karnataka, India