



BMS INSTITUTE OF TECHNOLOGY & MANAGEMENT

An Autonomous Institute Under VTU, Accredited by NBA and NAAC
Yelahanka, Bengaluru-560119.

Name of the Club: **AR VR HUB**

Date of Formation: 1-1-2024

Coordinators: Dr. Srivani P, Dr. Bharathi R , Dr. Durga Bhavani

Objective:

- Establishing a vibrant community of students, professionals, and enthusiasts interested in AR/VR technologies to promote networking, collaboration, and knowledge sharing.
- Conducting workshops, classes, and training sessions to educate individuals about the latest advancements, tools, and techniques in AR/VR technology. This includes raising awareness about the potential applications and implications of AR/VR across various industries.
- Offering opportunities for individuals to gain hands-on experience with AR/VR hardware and software through demonstrations, hackathons, and project collaborations.
- Promoting innovation and research in AR/VR technology by supporting projects, competitions, and initiatives that push the boundaries of what is possible in this field.
- Facilitating partnerships and collaborations with industry experts, companies, and organizations involved in AR/VR development, production, and application.
- Exploring ways in which AR/VR technology can be used to address social, cultural, and environmental challenges, and encouraging individuals to contribute to projects with positive societal impact.
- Providing opportunities for individuals to enhance their technical, creative, and entrepreneurial skills related to AR/VR development, design, and implementation.

Roles and Responsibilities:

Sl.No	Name of the faculty member, Designation & Department	Role in the Club
1	Dr. Srivani P, Assistant Professor, Department of AIML	Chief Faculty Coordinator
2	Prof. Bharathi R Associate Professor, Department of CSE	Chief Faculty Coordinator
3	Dr. Durga Bhavani A, Assistant Professor, Department of CSE	Chief Faculty Advisor
4	Dr. Anupama H.S, Dept of AIML Dr. Satish Kumar T, Dept of CSE	Convenors



BMS INSTITUTE OF TECHNOLOGY & MANAGEMENT

ARVR HUB

Report on Events conducted by the club

Events Organized on Augmented and Virtual reality

1. The department of CSE, had organized 6 day open course on "Gaming and Augmented and Virtual reality Model Designing : A Metaverse" between June 12-16, 2023. Experts from Industry and Academician had been the resource persons for this course. Students had learnt about importing objects in Unity application, Animation of the object, Using 3D models into Unity tool to build gaming applications, Physics, Graphics, Game Building, UI/UX Model Designing etc.



0. The Department of Computer Science and Engineering, BMS Institute of Technology and Management, was keen to establish a mutually beneficial partnership with M/s **Rayvector** to bridge the gap between academia and the industry. With this preamble an MoU was made between **Rayvector and BMSIT & M** on 4th August 2023.

M/s Rayvector Technologies(www.rayvector.com) is an advanced Technological Research Company working in the areas of Augmented Reality (AR) / Virtual Reality (VR), Artificial Intelligence (AI), Synthetic data and Blockchain.

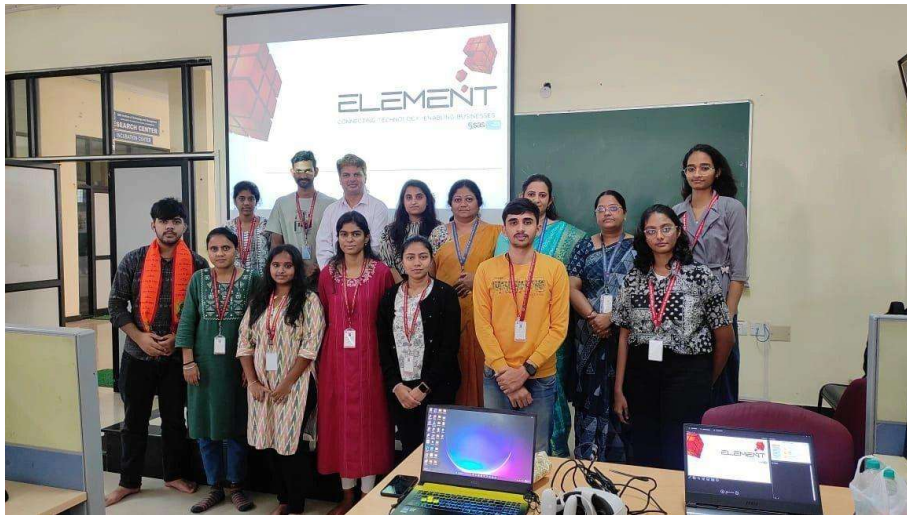
With this MoU, the organization had plans **to set up AR/VR at the Institute**

1. AR/VR Setup with resources
2. Integrated Certification Programs
3. AR/VR Literacy Program
4. FDP
5. Internship Program
6. Engagement in competitions



0. The department of CSE in collaboration with Element Technology had organized 6 Day workshop Program from 22nd January 2024 on web VR by Mrs Srinivas & Ms. Pragathi. Further, the sessions are conducted in virtual Mode.

Element's industry expertise and operational excellence align technologies, products and processes to deliver business value. Element is positioned to be leading– ImmersiveTech Solutions Provider, Service Provider, & IP Creator.



0. The All-India Council for Technical Education (AICTE), in collaboration with Meta and managed by IMIB" introduced the "Creators of Metaverse" program. a comprehensive three-phase initiative centered around Augmented Reality (AR) -technologies. More than 55 students had registered for this 2 days virtual workshop which was held during the month of January 2024 in 2 batches(Jan 8th &9th and Jan 24th & 25th). Further the students had submitted a project to get the eligibility to take up phase 2 , where 1 month Internship Program will be offered based on eligibility criteria. Awaiting the results.



0. Students of the Final year are doing a project on VR in education and are on the verge of completing the project. The main objectives of the project are
 - Utilize AR/VR to create engaging and interactive learning experiences that cater to diverse learning styles, making education more interesting and effective.
 - Integrate AR/VR content with the existing curriculum, ensuring that it aligns with the learning goals and standards.
 - Use AR/VR education as a means to empower the community by aiding them in visualizing complex spatial relationships and abstract concepts.



6) A new club “ ARVR HUB” was launched on 17th May 2024, with some objectives that offer numerous benefits and opportunities for students that help in skill development in align with latest technology trends.This initiative aims to foster innovation and provide hands-on experience in the rapidly growing fields of augmented and virtual reality.



7) Organized a 2 Day workshop on “Design of Industry Virtual Reality Application” for the students of various departments on 17th and 18th May 2024. The students had designed a VR Factory using Unity and deployed on MetaQuest device. Around 42 students had registered for this event.





Various projects done under this club demonstrated their projects in SRISHTI Exhibition 2024 during a 3 Day event on Augmented and Virtual Reality application.

One of the team got 3rd prize with Project titled “ WONDERLENS using Augmented Reality”





Students also participated in hackathon programs/ project exhibitions and Ideathon programs in other Universities and Engineering colleges in collaboration with Industry and academia.

One of the student batch has got an offer of funding from ART PARK IISC based on their project work done in AR/ VR.

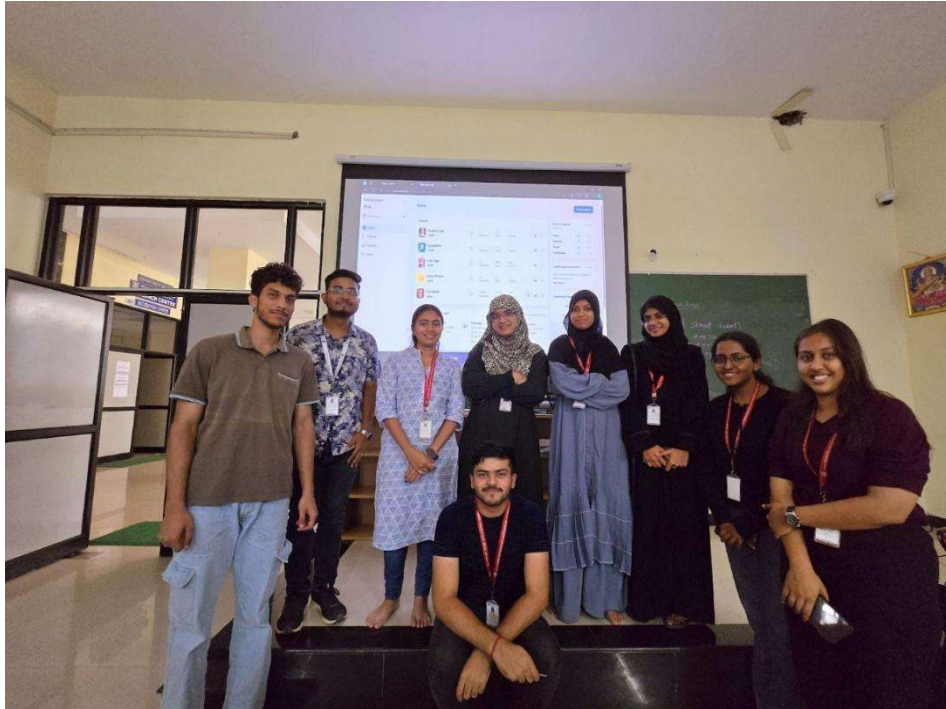
9) Organized a training program (Internship) on **Metaverse Technologies** for 10 days between June 1st - June 12th 2024, for Nagarjuna College of Management Science students. They were trained on Augmented and Virtuality-related applications for 10 days.

The faculty and students of AR VR Hub BMSIT&M hosted a 10-day **outreach activity** and training program for the students of Nagarjuna College of Management Studies at our campus on Metaverse. This initiative, part of our outreach activities, focused on METASPARK and Augmented Reality (AR) applications, providing students with hands-on experience and advanced insights into these cutting-edge technologies.

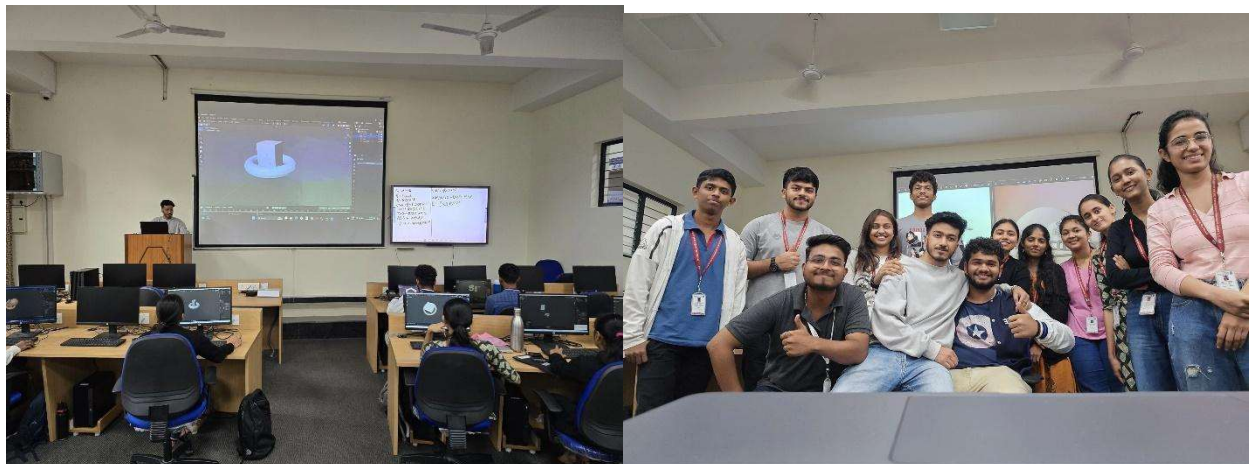
Throughout the program, students immersed themselves in the world of AR, discovering its potential and exploring practical applications. Their enthusiasm and dedication to learning were truly inspiring.



10) A student workshop on MetaSpark Studio was organized through our **AR VR HuB** on creating filters with Metaspark AR on 21st June 2024 in the department of CSE. In this workshop students explored creating and publishing some amazing effects with AR filters. They learnt the fundamentals of metaverse and gained hands-on experience in creating Augmented Reality (AR) effects using Meta Spark Studio.



11) Through our club we successful completed a 1-day student workshop on “Blender Basic Workshop!” on 19th July 2024. Our attendees mastered the essentials of 3D modelling and rendering, producing impressive digital art. We had an opportunity to encourage student as our resource person “Vansham Bhatia”, 4th Sem, CSE to deliver a hands on session on 3 D Modelling and designing.



12) The Department of AIML & CSE through AR VR HUB had organized a 1 Day orientation session with 1M1B in collaboration with Flaunch for the orientation on upcoming LLM hackathon which is launched with Meta.. Over 500 students from various departments attended the orientation, showing a keen interest in LLM and AR/VR integration on 22-10-2024. Industry experts, faculty members, and representatives from 1M1B and the AR/VR Hub shared insights and encouraged students to leverage this hackathon as a platform for innovation.





- 13) A MoU was signed between 1M1B in collaboration Flaunch Innovation Pvt Ltd and BMSIT &M through ARVR HUB on 22nd October 2024. This collaboration promotes students and faculty providing training programs, internships, skill-build programs, networking and many more. This MoU was initiated by Dr. Srivani P & Prof. Bharathi R from the departments of AIML & CSE.



14) The 1M1B Green Skills Academy launched its Green Internship Program aimed at preparing college and university students for climate-conscious careers. This initiative supports the growing demand for green jobs and sustainable practices, aligning with global efforts to combat climate change and foster a green economy. The orientation was launched on 29/11/24 with SESSION 1:

11 AM TO 12 PM and SESSION 2: 2 PM TO 3PM at Lab block BSN Auditorium with the benefits of

- Net Zero Roadmap: Actionable plans for achieving Net Zero emissions.
- Sustainability Recommendations: Proposals for energy efficiency and waste reduction.
- Green Skills: Development in sustainability, audits, and reporting.
- Mentorship: Guidance for leadership roles in sustainability.
- Career Opportunities: Pathways for future work in the green economy.



15) The mARtIAN AESSence event was organized on 26/12/24 between: 9 am to 3 pm at BSN Auditorium, Lab block and on 31/12/24 between 9 am to 3 pm at Kalpana Chawla Lab, Lab block. Participants gained hands-on experience in using Unity, a leading

AR/VR development tool, to design and develop virtual environments and had a thrilling and forward-thinking program that transported participants into the imaginative world of "Martian Land." Focused on one of humanity's most compelling dreams—exploring and colonizing Mars—the event offered a unique platform where creativity, problem-solving, and technical expertise came together seamlessly.



16) ARVR Hub BMSIT&M organized an orientation session on 20th May 2025 on the *Changemakers World Cup*, a global initiative by 1M1B (One Million for One Billion) aimed at empowering individuals to drive positive change -1M1B changemaker worldcup 2025.Changemakers World Cup (CWC) — a unique initiative to recognize top 500 changemakers of India 1M1B Activate Impact Summit at the United Nations Headquarters in New York.



17) Technical Stall @ Anveshana 2025 on 28th March 2025,BICEP.We received “Best User Experience Award” for ARVR HUB with cash prize. BEST ENTERTAINMENT AWARD



BMS INSTITUTE OF
TECHNOLOGY & MANAGEMENT



INSTITUTION'S
INNOVATION
COUNCIL
(Ministry of Education Initiative)



CERTIFICATE OF ACHIEVEMENT

Proudly presented to

ARVR Club

for securing the Prize for "**Best Entertainment**" in the ANVESHANA Club Showcase, held during ANVESHANA'25 by IIC-BICEP, BMS Institute of Technology and Management, Bengaluru on 28th March 2025.

PROF. SHAMA H M
COORDINATOR
INNOVATION CENTRE

DR. SEEMA SINGH
DEAN
INNOVATION AND ENTREPRENEURSHIP

DR. SANJAY H.A
PRINCIPAL
BMS INSTITUTE OF TECHNOLOGY & MANAGEMENT

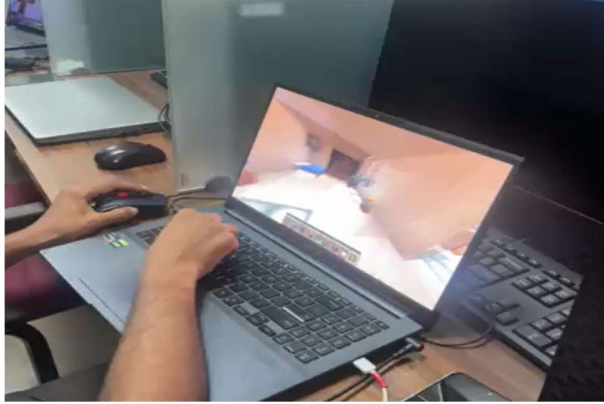
18) We had conducted a high-impact technical workshop focused on **Model Context Protocol (MCP)** technology. The event in collaboration with featured speakers from 0xDay and Kodeus, providing participants with valuable insights into highly specialized student hiring pipelines and practical, hands-on experience in building advanced server infrastructure. The workshop successfully covered both the industry landscape and the technical implementation of MCP, a technology critical to modern distributed AI systems, on, 15th October, 2025





19) The ARVR Hub, BMSIT&M, successfully organized the Minecraft Build-A-Thon 2025, a creative technical event aimed at integrating game-based learning with virtual environment design and problem-solving skills. Held on 21st November 2025 from 9:00 AM to 3:00 PM at Room 603, BSM Block, the competition enabled students to transform conceptual ideas into interactive 3D environments using Minecraft, while fostering AR/VR thinking and visualization. The event featured rounds such as online idea pitching, hands-on environment building, and a technical quiz, offering a comprehensive evaluation of creativity and technical competency. The contest concluded with a prize pool of ₹2000, encouraging enthusiastic participation and innovation among students.





20) The Department of Artificial Intelligence & Machine Learning (AIML) with AR VR Hub and Brainium Club, successfully organized the two-day SPRINTX 2K25 Hackathon on 21st and 22nd November 2025, in collaboration with Xthlete and Orayan Innovations. The event effectively promoted innovation, experiential learning, and industry-aligned skill development among AIML students. Through hands-on problem solving, mentorship, and collaborative teamwork, the hackathon strengthened students' technical competence, confidence, and creativity. SPRINTX 2K25 not only achieved its objective of nurturing real-world technical skills but also reinforced industry engagement and the department's commitment to fostering technological excellence.





AR VR LAB

SYSTEM SPECIFICATIONS

AMWIN GPU Desktop:

- 1 x AMD® B650 Chipset and AM5 Socket based WS Motherboard with 4 Memory DIMMs (Max. 128GB RAM)
- 1 x AMD Ryzen™ 9 7900X Processor (12Cores / 24Threads / 4.7GHz / 64MB L3 Cache / 170W)
- 1 x Liquid-Cooler 240 for Processor
- 1 x 32GB DDR5 5200MHz = 32GB RAM
- 1 x 500GB NVMe M.2 SSD
- 1 x Nvidia GeForce RTX 4060 (8GB) Graphic Card
- 1 x ATX/Mid-Tower Chassis (with Fans)
- 1 x 750W Power Supply Unit with 80+ Bronze
- 1 x USB Keyboard & Mouse
- 1 x Windows 10/11 Professional - OEM Pack

Meta Quest 2 Advanced All-in-One VR Headset,
2 x Touch Controller,
Charging Cable,
2 x AA Battery,
Power Adapter,
Glasses Spacer,
Silicone Cover



Members of AR VR CLUB:

Sl.No	Name of the faculty member, Designation & Department	Role in the Club
1	Dr. Thippeswamy G, HoD, Department of CSE Dr. Anupama H S HoD, Department of AIML	Conveners

2	Dr. Srivani P, Associate Professor, Department of AIML	Chief Faculty Coordinator
3	Prof. Bharathi R Associate Professor, Department of CSE	Chief Faculty Coordinator
4	Prof. Durga Bhavani, Assistant Professor, Department of CSE	Chief Faculty Advisor

SL NO:	EVENT CONDUCTED	DATE	ASSOCIATION	Remarks	No of Students attended
1.	Open Course : Gaming and Augmented and Virtual reality Model Designing	June 12 - 16, 2023	<ul style="list-style-type: none"> ● RVCE, ● Presidency University, ● Rayvector Technologies 	UNITY to build gaming application	30
2.	WORKSHOP on WEB VR	22 - 28 January , 2024	Element Technology Pvt Ltd	Web Virtual Reality (WEB VR)	17

3.	Creators of Metaverse (Phase 1)	Jan 8 th & 9 th and Jan 24 th & 25 th , 2024	All-India Council for Technical Education (AICTE) (in collaboration with META & 1M1B)	Metaspark	55
4	Srishti 2024 Challenge	May 24-26, 2024	National Level Project Exhibition	4 Teams have applied for this	16
5	Capstone Projects	Jan - May, 2024	VR in Rural education with immersive experience Solar System in AR	4 th Sem & Final Year students	4
6	Creators of Metaverse (Phase 2)	May 2024	Metaspark Studio- 1 month Training Program by AICTE	Eligible students from Phase 1	113
7	VR Workshop	17 th & 18 th May 2024	Design of Industry Virtual Reality Application	Designed a VR Factory using Unity and deployed on MetaQuest device	60
8	Srishti Innovation Exchange-24	May 2024	AR and VR projects	<ul style="list-style-type: none"> · 4th and 6th sem students with AR and VR Projects. · 4th sem students won the 3rd position 	8

9	10 day training Program as an Outreach Activity	June 1 st - June 12 th 2024	Metaspark AR & AR Core applications	This event was conducted for students of Nagarjuna College of Management Studies	10
10	META AR VR Workshop	21 st June 2024	AR filters	Metaspark Studio Filters.Created filters and published them.	10
11	Blender Basic Workshop!	19 th July 2024	Blender	Students to students learning on 3D model building using Blender	13
12	1 Day orientation session with 1M1B & MoU with 1M1B	22 nd October 2024	LLM Hackathon Orientation & MoU	Orientation session with 1M1B in collaboration with Flaunch for the orientation on upcoming LLM hackathon which is launched with Meta	400
13	Orientation on Green Internship Program organized by 1M1B	29 th November 2024	Internship Orientation	Providing green internship related to sustainability problems	350

14	mArtian AESSence event	26/12/24 & 31/12/24	Ideathon – Pitching the Martian Vision Virtual Martian Environment Creation	Participants produced innovative ideas, demonstrated problem-solving excellence, and created visually stunning Martian landscapes using Unity. The projects reflected a diverse range of ideas, from futuristic Martian habitats to interactive exploration simulations.	20
15	Hackathons- CSE & AIML	27 th March 2025	Neuronova- Virtual Reality with Sustainable Farming	Organized Hackathon in collaboration with CSE and AIML department	50
16	Technical Stall @ Anveshana 2025	28 th March 2025	BICEP	Best User Experience Award for ARVR HUB with cash prize	20
17	ChangeMakers Worldcup 2025 with 1M1B	24th May 2025	1M1B	Orientation on 1M1B changemaker worldcup 2025.Changemakers World Cup (CWC) — a unique initiative to recognize top 500 changemakers of	102

				India 1M1B Activate Impact Summit at the United Nations Headquarters in New York.	
18	MCP Servers - Mastering Protocol Development Event	15-10-2025	Kodeus AI and 0x Day	valuable insights into highly specialized student hiring pipelines and practical, hands-on experience in building advanced server infrastructure	110
19	BUILD_A_T HON	21-11-2025		creative technical competition designed to integrate game-based learning, virtual	40

				environment design, and problem-solving skills.	
20	SPRINTX HACKATHON	21st & 22nd November 2025	Xthlete & Orayain Innovations	promoting innovation, experiential learning, and industry-aligned skill development among AIML students.	100

Sivani P.

Co-ordinator



Principal
PRINCIPAL

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