DEPARTMENT OF INFORMATION TECHNOLOGY



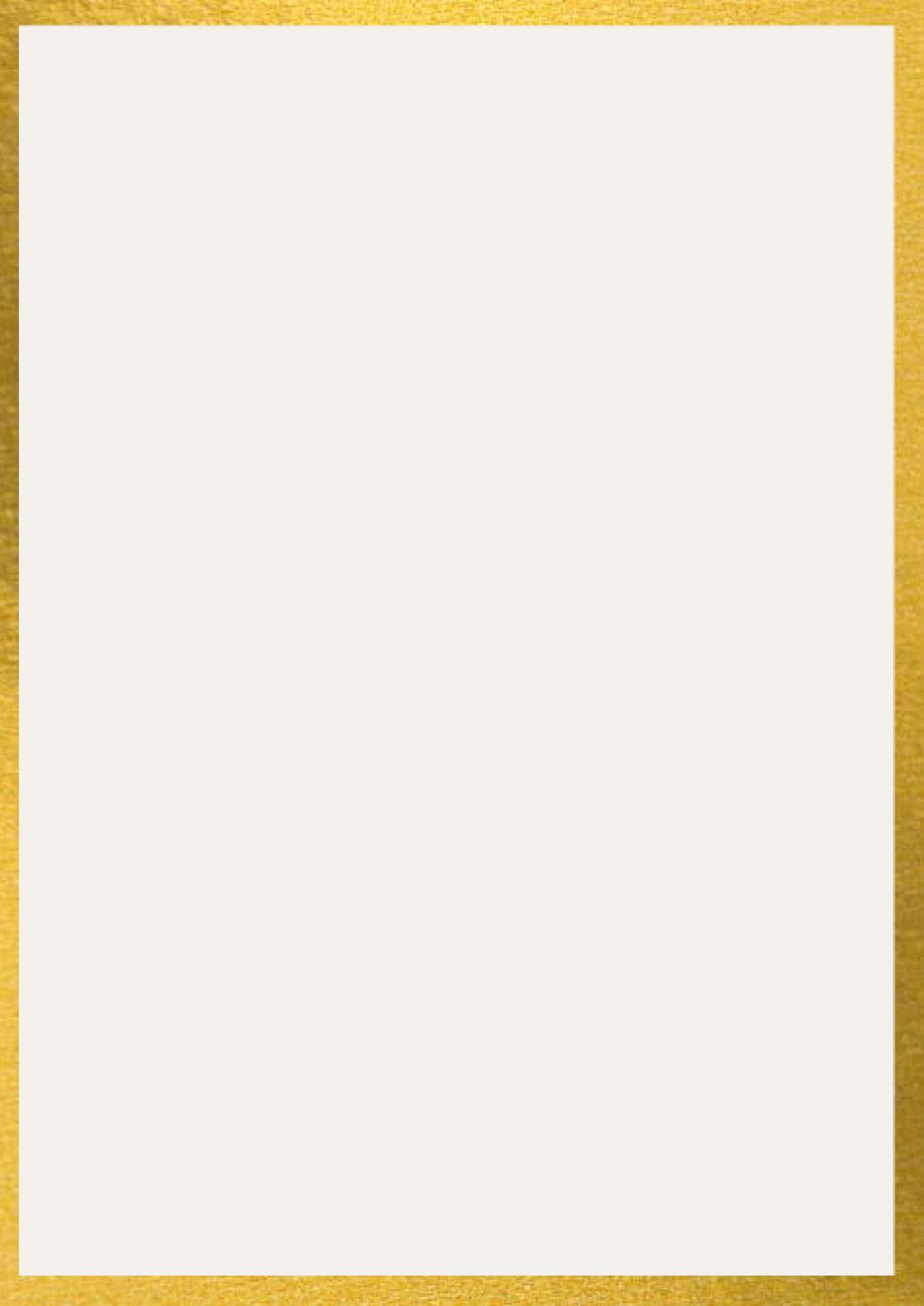


INFOQUEST Technical Magazine

volume 16 | Issue 4 |December 2023

Dr . Mahalingam college of Engineering and

Technology NPT-MCET campus, Udumalai road,Pollachi-642003 Coimbatore-District, Tamilnadu,India.



Programme Educational Objectives (PEOs)

B.Tech. Information Technology graduates will:

PEO1. Technical Expertise: Have high level of technical competency to identify problems and to generate innovative solutions, which would conform to the needs of IT industry.

PEO2. Lifelong learning:Successfully adapt to changes in roles and responsibilities, through lifelong learning, for collaborating professionally with various stakeholders.

PEO3. Ethical Knowledge:Ethically apply their

computing knowledge and skills considering societal, economic and environmental factors

Programme Outcomes (POs)

The graduates of Information Technology Programme will be able to:

PO 1. Engineering knowledge: Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.

PO 2. Problem analysis: Identify, formulate, review research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.

PO 3. Design/development of solutions: Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations.

PO 4. Conduct investigations of complex problems: Use researchbased knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions.

PO 5. Modern tool usage: Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools

including prediction and modeling to complex engineering activities with an understanding of the limitations

PO 6. The engineer and society: Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional engineering practice.

PO 7. Environment and sustainability: Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.

PO 8. Ethics: Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.

PO 9. Individual and team work: Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.

PO 10. Communication: Communicate effectively on complex engineering activities with the engineering community and with society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.

PO 11. Project management and finance: Demonstrate knowledge and understanding of the engineering and management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.

PO 12. Life-long learning: Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change.

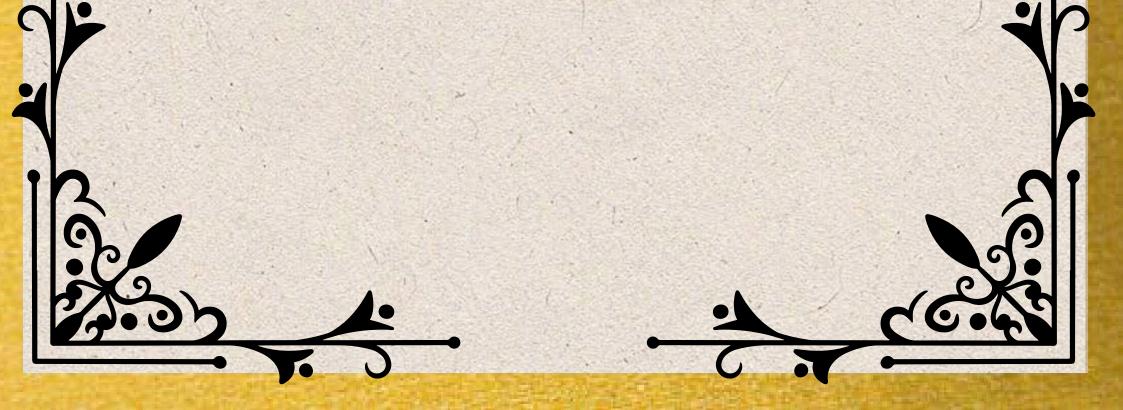
Programme Specific Outcomes (PSOs)

PSO 1. Build the practical expertise by employing emerging technologies and open source platforms.

PSO 2. Develop, improve, and implement computer algorithms while using multidisciplinary expertise for creating novel ideas

FACULTY ACTIVITIES





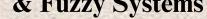
DETAILS OF JOURNALS PUBLISHED

Name of the Author	Title of the Paper	Name of the Journal
Sumathi ThirumalaisamyImproving Performance of Intrusion Detection Using ALO Selected Features and GRU NetworkSN Co Co		SN Computer Science
P Ponni	An Optimized Bagging Learning with Ensemble Feature Selection Method for URL Phishing Detection	Journal of electrical engineering and technology
Priya Varshini AG	Software effort estimation using stacked ensembled techniques and proposed stacking ensemble using	Journal of Intelligent & Fuzzy Systems



stacking ensemble using principal component regression

as super learner



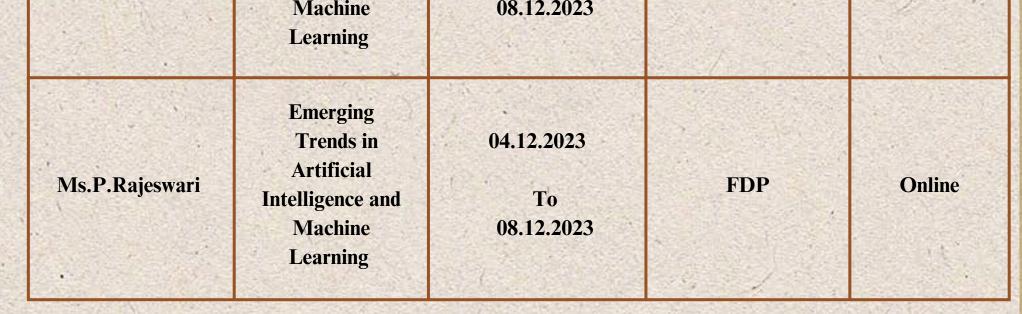
DETAILS OF FDP/STTP/PDP ATTENDED

Name of Faculty	Title of the programme	Duration	Programme Type (FDP/STTP/P DP)	Venue	
Ms.A.G.Priyavar shini	Deen Learning	Jul-Oct 2023	FDP	Online(IITM)	
Mr.N.Praveen Sundara Kumar	Ethical Hacking	Jul-Oct 2023	FDP	Online(IITM)	
Mr.N.Praveen Sundara Kumar	Computing using	Jul-Oct.2023 FDP		Online(IITM)	
Ms.P.Kalaivani	S.P.Kalaivani S.P.Kalaivani Machine Learning and Deep Learning- Fundamental & Applications	Jul-Oct 2023	FDP	Online(IITM)	
Ms.P.Kalaivani	The Joy of Computing using python	Jul-Oct 2023	FDP	Online(IITM)	
Ms.K.S.Sudhishna	Machine Learning and Deep Learning- Fundamental & Applications	Jul-Oct 2023	FDP	Online(IITM)	

Ms.K.S.Sudhishna	The Joy of Computing using python	Jul-Oct 2023	FDP	Online(IITM)
Ms.G.Saranya	The Joy of Computing using python	Jul-Oct 2023	FDP	Online(IITM)

DETAILS OF FDP/STTP/PDP ATTENDED

Name of Faculty	Title of the programme	Duration	Programme Type (FDP/STTP/PD P)	Venue
Ms.G.Saranya	Ms.G.Saranya Ethical Hacking		FDP	Online(IIT M)
Ms.D.Janani	Deep Learning	Jul-Oct 2023	FDP	Online (IIT Madras)
Ms.P.Ponni	Java Full Stack	27.11.23 to 15.12.23	FDP	Online
Mr.R.Govindaraj	Data Science MasterClass:A Beginner's guide to the world of Data	04.11.2023	FDP	Online
Ms.T.Sumathi	Emerging Trends in Artificial Intelligence and Machine Learning	04.12.2023 To 08.12.2023	FDP	Online
Dr.A.P.Janani	Emerging Trends in Artificial Intelligence and Machine	04.12.2023 To 08.12.2023	FDP	Online



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DETAILS OF CONFERENCE ATTENDED/PRESENTED

Name of the Faculty	Title of the Conference	Title of paper presented	Duration	Participation Type(Attended /Presented)	Year and month of publication
T.Sumathi	14th International Conference on Computing Communicati on and Networking Technologies (ICCCNT)	Prediction of Chronic Liver Cirrhosis Using Ensemble Classification Approach	06-08 July 2023	Presented	2023 and 23rd November

DETAILS OF WORKSHOP ATTENDED

Name of the faculty	Title of the programme	Venue	Duration	Programme Type(Seminar/ Workshop)
Mr.R.Prabhu	Intel India Education Conclave	Intel, Bangalore	3.11.2023 to 4.11.2023	Workshop
	Deep Learning for			

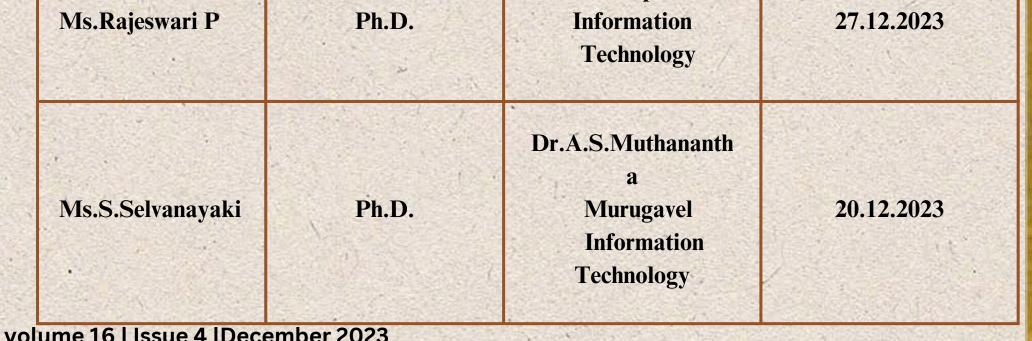


DETAILS OF BOOK PUBLICATION

Name of Faculty	Title of the Book	Title of the Book Chapter	Publisher	Month of publication
J.RamPrasath, N.Praveen Sundara Kumar	Wireless Communication in Cyber Security,	Machine Learning- Based Malicious Threat Detection and Security Analysis on Software-Defined Networking for Industry 4.0	John Wiley & Sons	Oct-23
R.Prabhu	Internet of Things and Its Applications	Nil	AN Publications	Nov-23

DETAILS OF FACULTY REGISTERED FOR PH.D

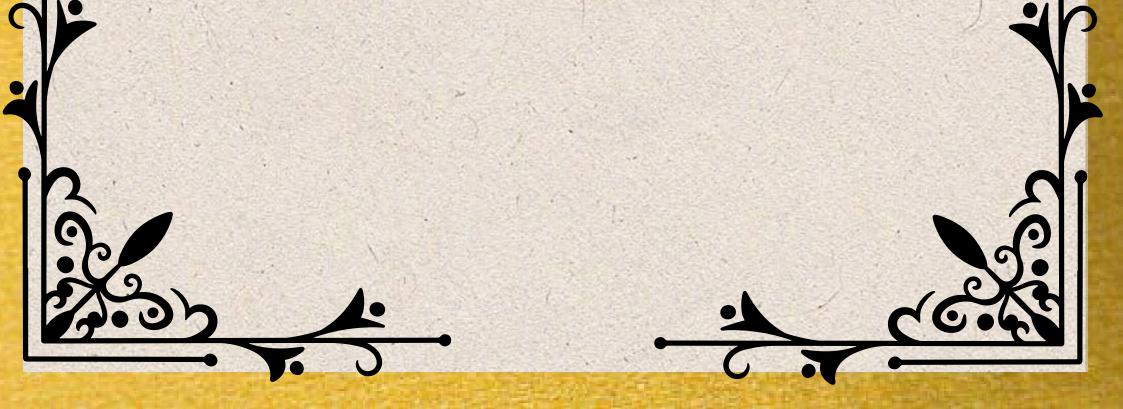
Name of the Faculty	Program applied for Ph.D. /D.Sc. / D.Litt. /LLD	Name of the Supervisor with department	Date of Registration
Ms.Keerthika G	Ph.D.	Dr.S.Ramakrishnan, Information Technology	21.12.2023
		Dr.J.Ramprasath.	



STUDENTS ACTIVITIES

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DETAILS OF STUDENT PARTICIPATIONS IN CO-CURRICULAR (PARTICIPATION)

International ang	y
Mr. Hari Sankar S.JInter-university26-10-2023BaranstromzKGISL In coimba	
Ms. D.Mohavarshini Inter-university 13-10-2023 Baranstromz Hindustan of Techn	
Ms. N.Priyadharshini Inter-university 13-10-2023 Baranstromz Hindustan of Tech	E.S. 3
Ms. K.Roobika Inter-university 13-10-2023 Baranstromz Hindustan of Techn	Strates and
Mr. K.S GOKUL Inter-university 10-06-2023 ELEMENTS 2K23 Sri Rama Engineerin	
Mr. V. Vasanth KumarInter-university10-06-2023ELEMENTS 2K23Sri Rama Engineerin	Marshall Sher

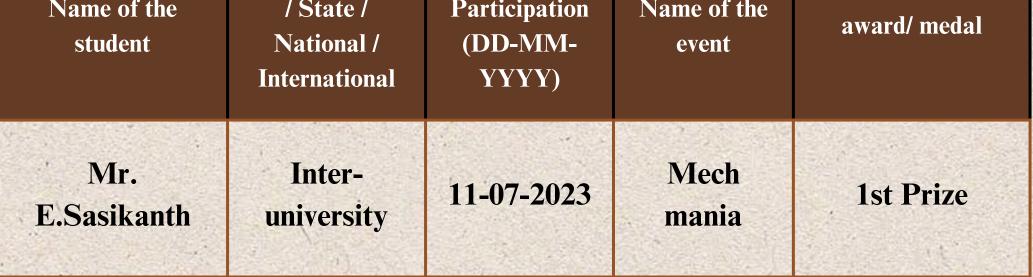


DETAILS OF STUDENT PARTICIPATIONS IN CO-CURRICULAR (PARTICIPATION)

Name of the student	Inter-university / State / National / International	Date of Participation (DD-MM- YYYY)	Name of the event	Name of the agencies/consultant s involved with contact details, if any
Mr. B.Saravanatamil	Inter-university	11-07-2023	Mech mania	Dr.Mahalingam college of Engineering and Technology
Mr. E.Sasikanth	Inter-university	11-07-2023	Mech mania	Dr.Mahalingam college of Engineering and Technology
Mr. Nisschal KR	National	12-05-2023	Qubits.IO	Bannari Amman Institute of Technology
Mr. Nisschal KR	National	12-06-2023	Paper Presentation	Bannari Amman Institute of Technology

DETAILS OF STUDENT PARTICIPATIONS IN CO-CURRICULAR (ACHIEVEMENT)

	Inter-university	Date of	
	Inter-university	Date of	Nome of the
			Name of the



THE REALITY REVOLUTION.

Today, we stand at the brink of a technological revolution known as Virtual Reality (VR). This transformative innovation has redefined our perception of reality, offering immersive experiences that transport us beyond physical constraints into captivating digital worlds. VR, once a futuristic concept, is now a tangible phenomenon reshaping industries from gaming and entertainment to education and healthcare. Let's delve into the captivating realm of VR and explore how this cutting-edge technology is revolutionizing our understanding of reality.

The global market size for AR and VR Is expected to reach \$297 billion by 2024, roughly ten times the \$30.7 billion market size in 2021.

The COVID-19 pandemic significantly influenced the adoption and development of Virtual Reality (VR) technology. With widespread restrictions on travel,

gatherings, and in-person activities, VR emerged as a valuable tool for maintaining connections, enabling remote work and education, and providing immersive entertainment experiences. During the pandemic, VR was used in various innovative ways. Beyond gaming, VR found applications in fields like education, healthcare, architecture, and virtual tourism. Educational institutions started using VR for simulations and immersive learning experiences, while healthcare professionals explored its potential for therapy, surgical planning, and medical training. Architects and designers utilized VR for visualizing projects in 3D, and tourism agencies offered virtual tours of destinations around the world.Today, VR continues to evolve with advancements in hardware and software, including standalone VR headsets that don't require a PC or console, as well as augmented reality (AR) technologies that blend virtual elements with the real world. The future of VR holds promise for even more realistic and interactive experiences, driven by ongoing innovations in AI, haptic feedback, and seamless integration with other emerging technologies. As VR becomes more accessible and versatile, its impact across industries and everyday life is poised to grow exponentially, transforming how we work, learn, play, and connect in the digital age. volume 16 | Issue 4 |December 2023



H. ASHIYA 727623BIT045



APPLE VISION PRO-DOCTOR USES VISION PRO IN SURGERY

Apple Vision Pro serves as a gateway to the metaverse, a virtual realm where users can explore, create, and connect in unprecedented ways. From attending virtual events to collaborating on projects, the possibilities are limitless.

While companies like Meta and Microsoft lead the charge in the corporate metaverse, Apple's entry into the consumer market will drive innovation and create new applications for mixed reality, impacting various industries including education, healthcare, and remote work.

A medical team at Cromwell Hospital in London strapped on the Apple Vision Pro during two spinal surgeries. Doctor 's are calling this device a "game-changing" tool.

The Vision Pro was used to view virtual screens imposed on the operating room to select tools and monitor surgery progress. The software used by Cromwell Hospital was developed by eXeX, a company that builds AI-driven apps pitched at surgeons.

"Working with eXeX to use the Apple Vision Pro has made a huge difference to the way we deliver care to our patients, It 's a real privilege to be the first team in the UK and Europe to use this software within surgery and I'm looking forward to seeing how this technology

advances and the impact it can have across hospitals." said Syed Aftab, one of the Cromwell surgeons who used the device.

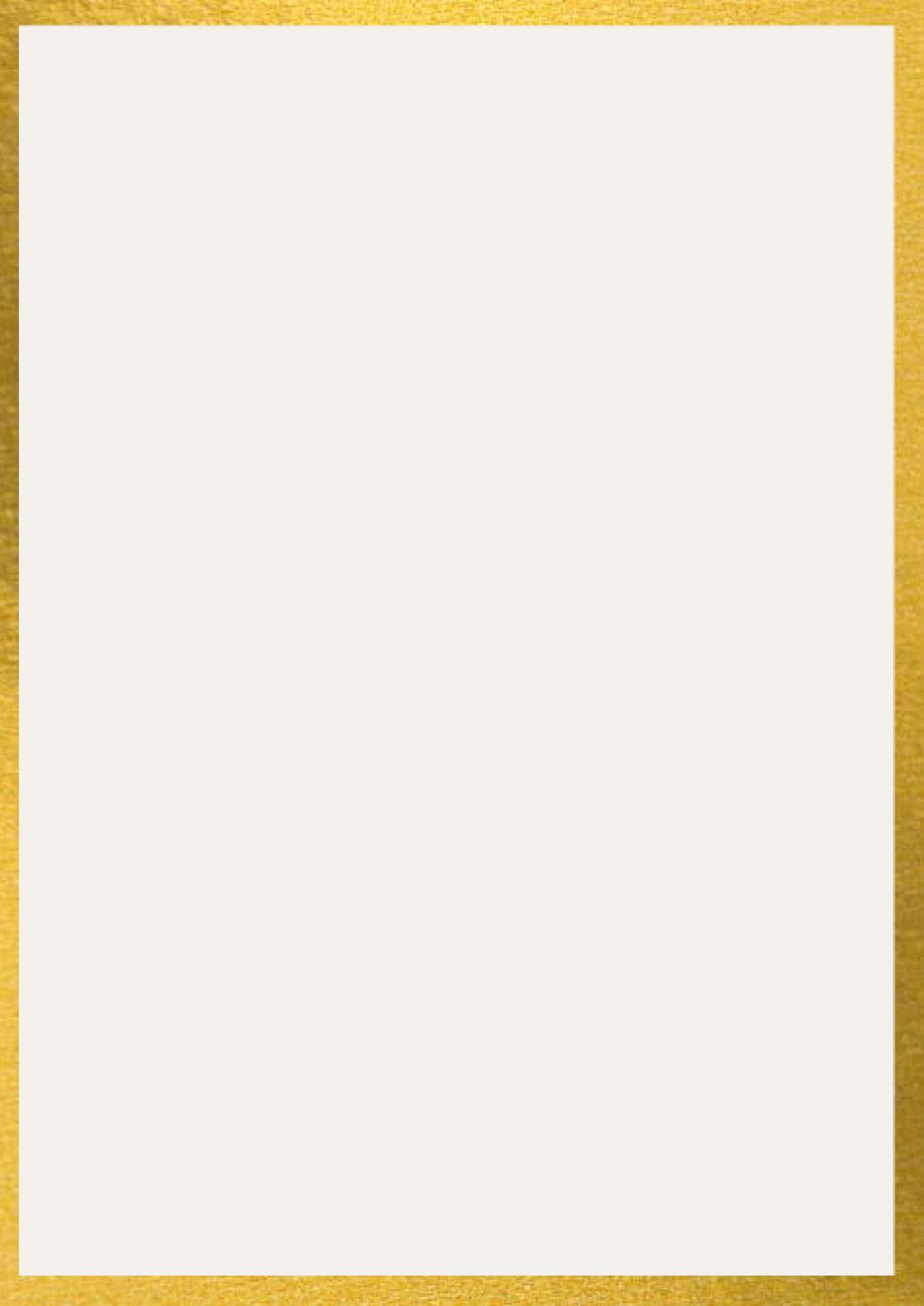
According to a recent press release from Apple, a company called Stryker is touting the "myMako" app for the Vision Pro, which helps doctors develop surgical plans for hip and knee replacements using 3D models and other tools. A variety of other companies and developers are harnessing the Vision Pro for medical training and education, with apps including Fundamental Surgery, CollaboratOR 3D, and Complete HeartX.



S. DHANYA SRI 727623BIT001

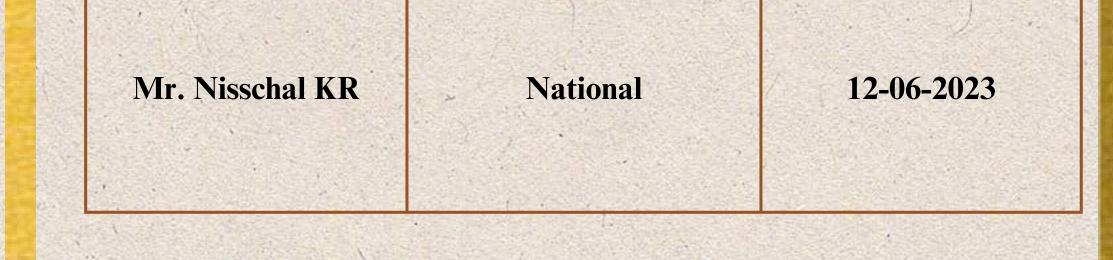


Bruno Gobbato, MD, an orthopedic surgeon at Jaraguá Hospital in Brazil, used the Apple Vision Pro during a shoulder arthroscopy.





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Name of the Student	Inter-university / State / National / International	Date of Participation
Mr. B.Saravanatamil	Inter-university	11-07-2023
Mr. E.Sasikanth	Inter-university	11-07-2023
Mr. Nisschal KR	National	12-05-2023
	A CONTRACT OF	



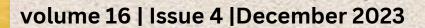
DRAWINGS



TEJASWINI .M.B 72762281T053

DIVYASREE . M 727622817093







VARSHNE . V 727622BIT068

VARSHAA SHREE. P



727622BIT058

PHOTOGRAPHY



SURYA N 72762281T014

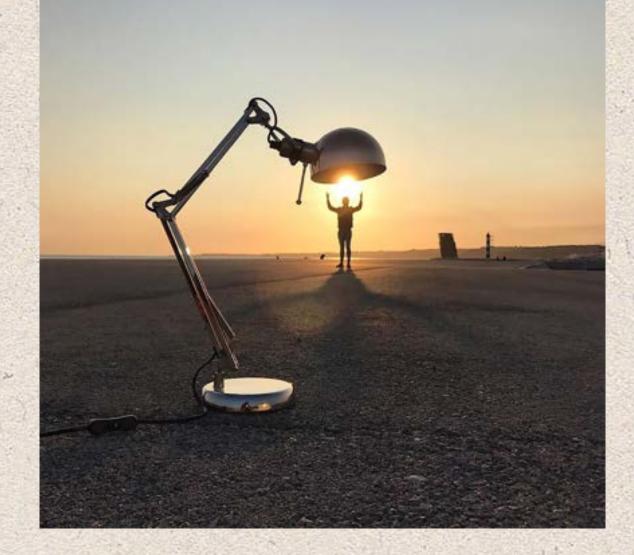
HARISH R 727622BIT040





ABDUL RAZAK H 727622BIT036

N SAKTHI UDHAYA Lakshmanan



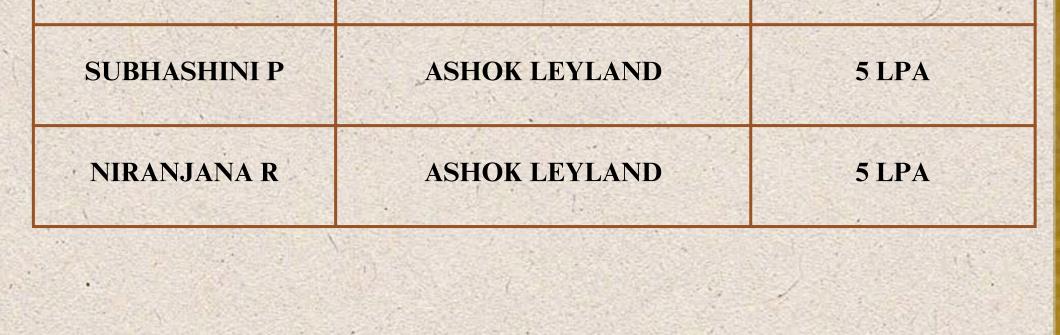
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PLACEMENT DETAILS



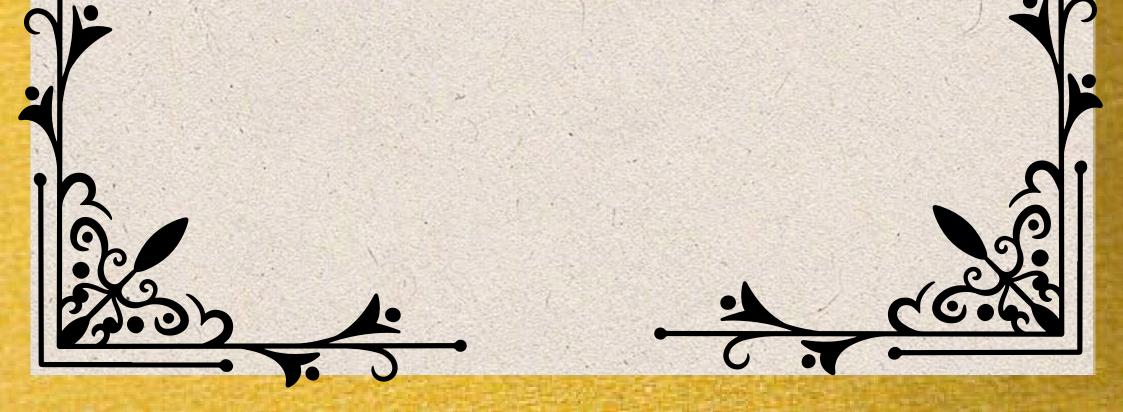
S.No	Company	No.of Candidates Placed
1	HUMBIRD.AI	1
2	CALIBRAINT	1
3	SANMINA	2
4	ASHOK LEYLAND	2

Name	Company	Packages
SUJITH R	HUMBIRD.AI	6 LPA
HAMISH K	CALIBRAINT	4 LPA
KAVIDHARSHINI A	SANMINA	3.75 LPA
VIVETHA M	SANMINA	3.75 LPA



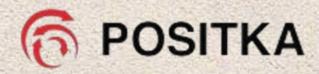
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SANMINA

solartis



mitsogo / finzly

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