

# EDITOR'S VOICE



#### Dear Readers!

Do one small thing and make today better than yesterday! Read Ahead and Enjoy!!! We have turned Edition 5 and proud to say that you are holding a very special Colossal issue in your hands. Today, I invite you to feast your eyes and warm your soul with this special edition. As time flies, each quarterly issue is curated by a group of bright and diligent students and faculty members, who gain firsthand experience in the world of publishing and at the same time, lend the spark that we need to carry on the good work It has been an extremely exhilarating time, as we have learnt so much in this journey and met such inspiring people, learning about all the fascinating things that they have done in their academic schedule within our premises.

It gives me immense pleasure to ensure that this newsletter COLOSSAL has successfully accomplished its objective. The reflection of the students' creativity and achievements as well as faculty members is the epitome of the Newsletter. Students have put forth their ideas and thoughts that are too deep to be expressed and too strong to be suppressed. Faculty members putforth their tireless effort technically and non-technically. I take the opportunity to thank all the contributors as their contribution is the reason that makes this edition endearing with our readers.

This herculean task of collecting and editing this newsletter would not have been possible without the sincere support of the members of the Editorial Board who sorted and tabulated under appropriate headings from the flood of information fabric wound with one another. I am thankful to all my colleagues who dipped their oars into the turbulent water of the newsletter and have sailed it to the shore of publication. It is a fine thing to have ability but the ability to discover ability in others is the true test.

I am really thankful to our respected higher authorities for entrusting us with the responsibility of bringing out this newsletter. I take this opportunity to thank all the dignitaries for sparing their valuable time to send their best wishes for the newsletter in the form of 'Messages'. I heartily wish all the readers my best wishes and hope this newsletter will enjoy your critical acclaim and prove itself to play a vital role in the all-round development of the department.

We reclaim to explore new dimensions in the process of teaching and learning and in turn these learnings should benefit the stakeholders and society at large. Let's all join hands in grooming the young minds and contribute to the Nation building.

We appreciate your invaluable advice or reproach on Colossal at every moment!!!.

**B.Amutha** 

SoC-Newsletter - Head



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if you prove it, it can be yours.....

#### PLATFORMS FOR GAME DEVELOPMENT



Unity has almost covered half of the gaming industries. From developing astonishing 3D games to offering a real-time platform, Unity stands at the top. With an easy user interface, it helps beginners with easy and understanding tutorials and guidelines. Using this platform for student or personal use will charge you nothing. However, the pricing differs with different versions namely, plus, pro, and enterprise versions. Furthermore, it provides amazing photographic effects. This helps in building the game more interesting. Some other creative features of this tool are graphics rendering, collaboration, and next-gen runtime. It offers incredible and unique potential to the game creators and developers of the gaming industry. Moreover, it covers all the required platforms such as:

- Android
- Tizen OS
- Windows
- Fire OS
- Unreal Engine

Unreal Engine is another popular game engine platform. It is mainly used to develop 3D games, but other industries also use Unreal Engine. For instance, the film industry uses it to create virtual sets and animated movies.

Unreal Engine is considered user-friendly, and one of its most significant advantages is that it doesn't require programming skills. There is also a marketplace where developers can get paid and free store assets to use with the platform. Like Unity, Unreal Engine supports desktop, mobile, and other platforms, another vital feature for game developers.

## Supported platforms:

- Microsoft Windows,
- Android and iOS
- Nintendo Switch, PlayStation 4 & 5, Xbox One & Series X/S] and Stadia
- Magic Leap, HTC Vive, Oculus, PlayStation VR, Samsung Gear VR, and HoloLens 2



### 2. SOLAR2D (EX CORONA SDK)

Solar2D, formally known as Corona SDK, allows game developers to build 2D mobile apps. It is a Lua-based game engine focusing on ease of iterations and usage. The development kit is free to use and open-source. It also supports game development across multiple platforms.

Solar2D has an active community of users and a marketplace where 2D features and plugins are available. It also features Solar2D Playground, an interactive website for creating and running projects instantly online.

## Supported platforms:

- iOS and Android
- Kindle
- Desktop applications for Windows, Linux, and macOS
- Connected TV applications for Apple TV, Fire TV, and Android TV

#### **Buildbox**

Buildbox is one of the most accessible game engines and the best game development platforms for creating Android games. It is highly suitable for beginners with no coding experience and doesn't require any programming or scripting skills.

Buildbox allows game developers to easily create 2D and 3D mobile games in a short time. It uses drag-and-drop functionalities to create professional-looking games. The big community of users is also an additional benefit that will get you to start developing your mobile games.

## Supported platforms:

- iOS
- Android



# Challenges in AI Development and Implementation



The significance of artificial intelligence in business and contemporary life cannot be overstated. In this article, we can look at the top issues that businesses have with developing and implementing Al systems and offers ten solutions. You'll probably encounter certain challenges if you decide to design artificial intelligence software for your business. Knowing them beforehand could make your job easier. These are the most typical issues with Al development and application that you could run into.

## 1. Selecting the appropriate data set

For AI to be effective, data availability and quality must be there. A corporation must employ the appropriate data sets and have a reliable supply of pertinent information that is clean, accessible, well-governed, and secured to ensure the most effective and timely AI capabilities. Unfortunately, it is not possible to program AI algorithms to stop the flow of bad and inaccurate data; nevertheless, businesses can contact AI specialists and collaborate with the owners of various data sources to get around the difficulties of applying AI.

#### 2. The issue of bias

The data that AI systems are trained on determines how good they will be. Good artificial intelligence development services depend on good data. If adequate data aren't available, businesses will have a difficult time implementing AI due to biases, which manifest as anomalies in the output of ML algorithms when they provide findings based on prejudices in the training data or discriminatory assumptions established during the machine learning process. Racial, gender, community, and ethnic biases can coexist with poor data.

Such biases need to be removed. Real change might result from either the development of transparent algorithms that can be read or from the training of AI systems on objective data. Additionally, a lot of businesses that create artificial intelligence make significant investments in creating frameworks and methods for controlling

## 3. Data storage and security

Large-scale data availability is a requirement for the majority of artificial intelligence development services to train the algorithms.

Despite the fact that producing enormous amounts of data opens up more business prospects, doing so also raises storage and security concerns. The likelihood of data leakage into the hands of someone on the dark web increases as more data is created and as more individuals gain access. Because this data is produced by millions of users worldwide, difficulties with data security and storage have spread to a global level. The finest data management environment for sensitive data and training algorithms for Al applications must be employed, thus enterprises must make sure of this.

#### 4. Infrastructure

High internet speeds enable artificial intelligence-based solutions that improve our daily life. Al systems can operate at these speeds if a corporation has the necessary infrastructure and advanced computing power. However, because management is frequently afraid of the costs involved in updating the systems, they choose not to deploy Al at all. As a result, most businesses continue to use obsolete infrastructures, apps, and devices to manage their IT operations. Although businesses that create or use artificial intelligence should be prepared to raise the bar for their IT services, for many IT businesses, the biggest issue is still switching from antiquated infrastructure to traditional legacy systems.

### 5. Integration of Al

The need to integrate Al into current systems creates the first set of difficulties with its implementation in business. It needs the assistance of Al solution providers with a lot of experience and knowledge. It's more difficult to make the switch to Al than it is to just add new plugins to an existing website. Infrastructure, data storage, and data input should all be taken into account and protected against harm. Both the smooth operation of the current systems and compatibility with all Al needs must be guaranteed. Additionally, after the transition is complete, the staff members need to receive enough training on how to use the new system.

### 6. Computation

The information technology sector faces numerous obstacles and must always stay updated. No other sector has grown as quickly. The largest issue the industry has ever faced is getting enough processing capacity to process the enormous amounts of data required for developing AI systems. It can be difficult to reach and finance that level of computation, especially for start-ups and small-budget businesses.

## 7. Specific expertise

One of the most commonly mentioned issues is finding and training individuals with the necessary skill set and knowledge for artificial intelligence installation and deployment.

Lack of information impedes businesses' adoption of AI technologies and stops them from doing so smoothly. Because of the huge difficulty, this presents to the IT sector, businesses may consider allocating more funds for training in artificial intelligence app development, hiring developers with experience in this field, or purchasing and licensing resources from larger IT firms.

#### 8. Expensive and Uncommon

As previously said, the integration, deployment, and implementation of AI call for a specialist with a specific level of training and experience, such as a data scientist or data engineer. The fact that these professionals are pricey and are now relatively hard to find in the IT market is one of the biggest obstacles to deploying AI in business. Therefore, it can be difficult for businesses with limited resources to hire the qualified experts the project calls for. Additionally, once you choose to adopt or design an AI-based system, you'll need to constantly train users, which can call for specialized high-end personnel who are rare.

#### 9. Legal problems

Companies need to be worried about a variety of legal issues related to the creation and use of artificial intelligence applications. The user data that the algorithms gather are quite delicate. Inaccurate data governance systems and algorithms used in Al applications will always produce inaccurate forecasts and reduce firm profits. Additionally, it might transgress rules or laws, placing the company at risk of legal troubles.

# MEMORANDUM OF UNDERSTANDING



# MoU with Blue prism:

SRMIST signs a Mou for development programmes with SS & C Blue Prism.

The joint venture Program of SRM and Blue prism provides a Free SS&C Blue Prism software license, and a User-friendly LMS provides access to world-class teaching, learning, and certification resources for Faculty and students.

It also provides Free hands-on labs, SS&C Blue Prismauthorized curriculum to prepare for certification exams, inperson, virtual, and on-demand Train-the-Trainer classes and RPA Competitions and Campaigns.

# MEMORANDUM OF UNDERSTANDING





# **British Council Going Global Partnership Grant on Masters in Disaster Management**

As an International Collaboration with the Teeside University, Dr. C.Lakshmi, Professor/CINTEL along with SRM faculty attended train the trainers program at Kolhapur and at SRM in a span of 2 weeks.

The key takeways of the program was Practical Exposure

Technology Based Solutions, Action based learning, Understanding the Uniformed Personels role on Man-made disasters, Cyber Security and its importance, Universal Human Values and Health and Wellness



# MoU with University of Queensland, Australia:

Dr.Ferni Ukrit, Associate Professor, has been nominated as the faculty coordinator for the MOU with University of Queensland, Australia from the department of Computational Intelligence.

# AR/VR

- The gaming industry is continually developing, with new technologies introduced every year, such as AR in gaming. You cannot simply ignore the presence of gamification, which is applied to e-learning curriculums. But what about the actual games on PCs, consoles, and mobile devices? There are countless applications of AR technologies in the gaming industry, ranging from enhancing the player's experience to creating new gameplay mechanics.
- The AR technology itself has an impressive potential to be applied in the gaming industry. The market also shows a strong leaning towards mobile gaming.
- The gaming industry has been quick to adopt AR technology and is one of the most active sectors in terms of AR development. The release of the Pokemon GO game in 2016 was a watershed moment that demonstrated the potential of AR in the gaming industry. The game quickly became a global phenomenon, with millions of people playing it on their smartphones. The success of the first AR mobile games has led to a renewed interest in AR technology from the gaming industry.
- Several AR games in development are designed for AR headsets, such as the Microsoft HoloLens and the Magic Leap One. These games include Project X-Ray, an immersive first-person shooter developed by Microsoft, and Scraper: First Strike, an action-adventure game developed by Labrodex, Inc. It is clear that AR has a significant impact on the gaming industry and will forever change how we play video games.
- While it might sound obvious, Virtual Reality and Augmented Reality are distinct in the gaming industry. To put it simply, VR creates an entirely immersive experience (usually involving a VR headset), while AR augments the player's existing surroundings. In AR, 3D graphics are emphasized to superimpose the pre-generated imagery over the user's view of the real-life environment. In contrast, AR technologies in gaming rely upon utilizing the player's senses (sight, primarily) to locate in the simulated environment.
- As for VR, it opens up a whole new world of experiences for ordinary gamers. Traditional gaming titles cannot replicate the immersiveness that virtual reality has. Some of the most considerable benefits of VR in gaming are:
- Most VR games are designed to be played using physical exercise. Strictly in this sense, the combination of entertainment and exercising makes VR revolutionary on its own.
- Compared to the mentioned hit games, such as Pokemon GO or Zombies, Run!, the future
  of AR in gaming still looks promising. At first glance, some future trends of AR gaming
  might include more realistic and immersive graphics and the extended use of real-world
  objects and locations. It would also be entertaining for players to enhance the social
  interaction scale within AR games. One of the best examples is The Walking Dead: Our
  World, which successfully combines an immersive AR experience with multiplayer options









Dr.T.R.Saravanan Completed IBM Cognitive Course "Data Science Methodology" by December 2022. Also he Delivered two sessions for the 6 days Faculty development program on "Artificial Intelligence" conducted by Department of Computational Intelligence, School of Computing, SRM Institute of Science and Technoloy, Kattankulathur from 28-12-2022 to 03-12-2022

Dr.S.K.Lavanya Completed Natural Language Processing Course from NPTEL. Also she delivered a session on NLP for Humanoid Robots in the ATAL FDP on AI in Robotics at Agni College of Technology on 24.1.2023.

Dr.S.Sadagopan Delivered a technical talk on the topic: "Role of Activation function in Machine Learning"in 6 days National level FTP Programme on Recent Technologies (29th Nov - 6th Dec 2022)Organized by Department of CSE, School of Computing, Sathyabama Institute of Science and Technology



The Directorate of Student Affairs organized JOSH' 23 a cultural event for the teaching and non-teaching staff of SRMIST from 25th Dec 2022 to 5th Jan 2023.

Team CINTEL has participated in the Singing Event and bags the Second place



Dr.Athira M. Nambiar Delivered a technical talk on 30th November (FN &AN) on the topic "Agents, Game theory and Constraint satisfactory problems" during 6 days FDP on "21CSC304T-Artificial Intelligence "Course from Nov.28th to Dec.3rd 2022.

Dr.M.Salomi, Dr.R.Athilakshmi, Dr.N.Meenakshi, has published a book "JUST START PYTHON".ISBN NO:978-93-91462-46-8 Publisher:Visual Soft India Private Limited

Dr.G. Maragatham delivered a technical talk on 29th November on "Search Algorithms used by AI agents", 6 days STTP Programme on ARTIFICIAL INTELLIGENCE (28th Nov - 3rd Dec 2022).

Dr.S.Karthick, Dr.S.Selvakumarasamy, C.G.Anupama, C.Arun. Dr.D.Anitha Completed 15 weeks course on "Basics of Remote Sensing, Geographical Information System and Global Navigation Satellite System" offered by ISRO-IIRS.

Mrs.A.Jackulin Mahiraba Completed a samsung Prism worklet titled" Defect code tracer".

Mrs.A.Jackulin Mahiraba, Dr.J.Jeyasudha has acted as a delegate and given a technical talk on" Importance of data analytics in a FDP organized by the Department of Computer Science and Engineering, Sri Sai Ram Institute of Technology (Autonomous), Chennai, Tamilnadu in association with IEEE Madras Section.

Mrs.A.Jackulin Mahiraba, Dr M. Vimaladevi, Dr.A. Revathi, Dr.S.K.Lavanya, Dr,G,Dinesh has participated in Defence Hackathon 2022 on 15th and 16th December under SRM Innovation Incubation and Entrepreneurship Centre.

Dr.S.Amudha participated and successfully completed the 5-day Online FDP on the theme "Inculcating Universal Human Values in Technical Education" organized by All India Council for Technical Education (AICTE) from 05th December to 09th December 2022.

Dr.T.R.Saravanan Completed IBM Cognitive Course "Data Science Methodology" by December 2022. Also he Delivered two sessions for the 6 days Faculty development program on "Artificial Intelligence" conducted by Department of Computational Intelligence, School of Computing, SRM Institute of Science and Technology, Kattankulathur from 28-12-2022 to 03-12-2022

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Dr.R.Athilakshmi has Present a session at "Faculty development programme on Advance Methods of Research" which is being held from 14th - 30th November, Sathyabama Institute of Science and Technology, Chennai. Session Topic: "Object Detection in Current and Future Direction"

Dr.A.Robert Singh has received best paper award for present a paper titled "Multiclass classification of brain tumor for MR images using shallow autoencoder based neural network" 2nd International Conference on Mobile Networks and Wireless Communications(ICMNWC-2022).

Dr.Sudha Rajesh has published a book title "Design and Analysis of Algorithms", ISBN: 9789394304789, GCS Publications, India. Also she successfully completed online MOOC course "Leading Change in Teaching and Learning for a Digital World" offered jointly by the Commonwealth of Learning and Athabasca University, Canada.

Dr.T.Subha received the Women Researcher Award from e-International Research Awards on Science, Technology and Management – INSO. Also she acted as a Keynote speaker for 2 Days Faculty Development Programme on "RESEARCH AVENUES IN COMPUTER VISION USING MACHINE LEARNING" and delivered a session on 26.12.2022 organized by Sri Krishna College of Engineering and Technology, Coimbatore, duiring 26.12.2022 & 27.12.2022

Dr.K.Suresh has published a book "Python Programming for Data Science", ISBN NO:978-93-5625-613-2

Dr.R.Babu has Successfully completed "Computational Neuroscience" a MOOC from the university of Washington offered through Coursera

Dr.M.Kanipriya has completed online course on "Learn Python: The Complete Python Programming Course".

Dr.S.Prithi has successfully completed online MOOC course "Leading Change in Teaching and Learning for a Digital World" offered jointly by the Commonwealth of Learning and Athabasca University, Canada. Also she completed 6 weeks online MOOC course "Essential Life Skills (ELS)", Also she served as Resource Person and handled session on "Natural Language Processing" for the FDP "Advanced Methods of Research" conducted by Sathyabama University from Nov 14 to Nov 30, 2022

Dr.A.K.Reshmy has published a book titled "Data Analytics using Python", ISBN: 978-93-5515-565-8, Book Rivers, India. Also she successfully completed online MOOC course "Leading Change in Teaching and Learning for a Digital World" offered jointly by the Commonwealth of Learning and Athabasca University, Canada.















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# CINTEL EVENTS 2023



















Ankush Dutta from II Yr AIML U2 Section won Ens Pool prize in EthIndia'22 hackathon

Vedant from II Yr AIML U2 Section has passed JLPT (Japanese Language Proficiency Test) N5 level

The following Students of CINTEL department has successfully completed NPTEL courses:

- Isra Wali The Joy of Programming with Python
- Seenu Nahak Introduction to Machine Learning
- Jasmann Singh Programming in modern C++
- Prince Singh The Joy of Programming with Python
- Ananya Jha Reinforcement learning
- Madhav Khatoria Introduction to Machine Learning
- S P JAGRIT- Database Management Systems

Vanshika Singh Gour - won Second prize in "Webdev Contest- WebFab" conducted by NWC association in collaboration with IoT Alliance - AICTE Spices Funded Club Vanshika Singh Gour - Participated in Defence Hackathon 2022 on 15th and 16th December under SRM Innovation Incubation and Entrepreneurship Centre. Sivaprasath of III year B.Tech Arificial Intelligence has participated in phase 1 of the iOS App Development Course held from 27th october to 12th november 2022.









Mr.Sivaprasath
III B.Tech Al

Ms. Iram Kamdar Mr. Aryan Dwivedi
III B.Tech CSE Spl AIML III B.Tech CSE Spl AIML

Mitacs Globalink Research Internship is a highly competitive programme that pairs top-ranked international students having specific research expertise from 15 countries worldwide with faculty at top Canadian academic institutions. This is a twelve (12) week research project of mutual interest between May and October 2022.

The students from the Department of Computational Intelligence will spend three months in Canadian universities as a part of this fully-funded research internship.

Mr.Sivaprasath will work on "Hate Speech and older adults in Social Media, with Ryerson University.

Ms.Iram Kamdar will work on Medical diagnosis with thermal image processing. with Université du Québec en Outaouais - Gatineau

Mr.Aryan Dwivedi will work on Improvement of compression efficiency of an immersive (3D-360) video coder (MPEG-TMIV) with École de Technologie Supérieure

# TI'S TIME TO Liverty Calendary

(NOV 21-25)

**EVENT 1** 

SHORT TERM TRAINING PROGRAMME ON "INTELLIGENCE IOT SYSTEM DEVELOPEMNT FROM SCRATCH TO PROTOTYPE BY - DR.FERNIUKRIT

(DEC 7-9) **Z** 

**EVENT 2** 

WORKSHOP ON REALTIME
APPLICATION OF MACHINE LEARNING
IN HEALTH SCIENCE BY
DR.T.R.SARAVANAN.

(DEC 12-17) 3

**EVENT 3** 

FDP ON DESIGN OF ARTIFICIAL INTELLIGENCE BASED SYSTEM FOR DISATER MITIGATION AND MANAGEMENT-DR.C.LAKSHMI.

(JAN 23-28) <mark>4</mark>

**EVENT 4** 

FDP ON INTELLECTUAL PROPERTY RIGHTS AND RESEARCH PROPOSAL WRITING(DR.M.KRISHNAVENI).



"Celebrating India's 74th Republic Day: A Reflection on Our Past, Present, and Future"

As we celebrate the 74th Republic Day of India, it is an opportunity to reflect on the rich history and cultural diversity of our nation. On this day, we remember the sacrifices of our freedom fighters and pay homage to the Constitution of India, which was enacted on 26th January 1950, declaring India a sovereign, secular, and democratic republic.

As we celebrate this day, it is important to remember the ideals of freedom, equality, and justice, which form the cornerstone of our Republic. These values have been the driving force behind India's progress and have helped us to overcome numerous challenges in the past.

# SRMKZILLA



## Hello world!

SRMKZILLA is a part of the Mozilla Clubs, inspired by the Mozilla Learning Network. Being a professional technical club of SRMIST, we help students master various skills through our open source projects, web and app development, technical fests, and workshops. We as a club want to push technology to its limits which is why all our products are open source.





# Values. Mission.

We actively notice our communities and cater to their demands irrespective of the hardships that may hinder our way.

As a part of Mozilla's opensource community, our mission is to provide a platform for inquisitive minds by guiding and empowering their aspirations.

# Ideation. Design. Code.

Nerdy techies with code editors, developers fixing bugs, and everything "geeky" might be the typical image for college technical club. Well, SRMKZILLA is a LOT MORE than iust technical club. We are a hub of unique ideas. incredible tech products, resourceful events, quality mentorship, and endless creativity



# ARTIFICIAL INTELLIGENCE. REDEFINED

Hailed as the ultimate future technology, Artificial Intelligence is all set to take over the world and further enhance the essence of the human life. Comprehending this vision, the idea for CINTEL's Next – Gen Al was born.

**DIVE IN** 

### **Expanding Horizons**

A unanimous passion to be part of the revolution to bring ideas back to the table, ideas that can transform the very mindset of the world.



The flagship event of TEDxSRMIST was organized on 21st January 2023 with great enthusiasm and in the presence of great speakers. It was held in Mini Hall - I, TP Ganeshan, SRMIST. TED is a non-profit organization that spreads ideas via thought-provoking talks. Everything they do has a final goal, and that is: How can we best spread great ideas? The event started with the singing of the Tamil State Anthem and the customary lighting of the Lamp.





The welcome speech was given by Dr. B. Hariharan, in the presence of the chief guests, the HOD of Computational Intelligence department and the chairperson of the School of Computing. Without any further ado, the stage was taken up by the speakers one by one. The overall event was basically a bracket of short, knowledgeable talks, demonstrations, and recitals that were topic concentrated, and covered a wide range of themes to stimulate learning, inspiration, wonder and provoke consultations that matter. The content and design of each speaker was unique and brewed independently, but all of them had several commodities in common.



The event included several speakers such as Sarvjeet Soni who tried to prove how Swami Vivakanand's ideology stays true in today's life; Shibu who talked about Jayant, Gamification of Education; Karthik Raghavendran, who gave an insightful talk about the Future of Neural Interfaces and Dhruv Sikka who talked about the use of Data Analysis in Sports.

# **CLOUD GAMING**

# How does cloud gaming work?

- If one comes back to augmented reality in gaming, the mobile market seems to be the
  most promising direction. The success of mobile AR games shows that augmented reality
  serves as a great medium. In particular, it can become a missing link between real-life and
  digital environments, allowing to design of fascinating experiences. For that reason, tech
  companies such as NVIDIA and Sony heavily invest in AR/VR research projects to further
  adopt such technologies into the gaming industry.
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  companies such as NVIDIA and Sony heavily invest in AR/VR research projects to further
  adopt such technologies into the gaming industry.
- because Shadow is a full, Windows 10 PC, you can use it for any purpose:- play your favorite games, video editing, 3D rendering, homework, sound editing, computer assisted Drafting(cad), Watching netflix, hulu, etc, alternate to your computer

# Who are the front runners of cloud gaming?

Project xCloud Blade Animation

• There are currently three major front runners of cloud gaming, but we expect several others to offer stiff competition in the not-so-distant future

## **Google Stadia**

- Google Stadia is basically a game console in the cloud. The service itself is free, but you need to buy the games
- As previously stated, the "free" model streams all games purchased through Stadia at full HD. The monthly subscription ups the resolution to 4K and offers a "free" library of games you can play with an active subscription. You "own" the games you buy, but they're only playable through Stadia — just like purchasing gaming apps on the Play Store.
- Alongside partnerships with publishers like Ubisoft, Bethesda, Square Enix, and THQ Nordic, Google has also invested in first-party exclusive games, with former EA and Ubisoft executive Jade Raymond leading an internal development team. Current third-party titles include Cyberpunk 2077, Baldur's Gate 3, Watch Dogs: Legion, Borderlands 3, and loads more.



### **GeForce Now**

GeForce Now takes the exact opposite approach of Google Stadia. Instead of a game console in the cloud, GeForce Now works with the games you already own on Steam, the Epic Games Store, and other PC gaming platforms. It's free, too. Free users can play for an hour at a time with the games they already own, and they may need to queue. Although sessions are limited to an hour, you can start another session immediately. The \$5 per month paid tier gives users immediate access and a six-hour session length, and it allows you to turn on ray tracing in supported games.

GeForce Now worked with just about every PC game available originally, but publishers were quick to remedy that. Some of the biggest AAA games were removed, but Nvidia has slowly added more back to the platform. Now, it supports all new Ubisoft games, nearly every title in the Epic Games Store, and a slew of other AAA releases. Although the list of supported games isn't as large as it once was, GeForce Now still provides a far larger library than Stadia and Xbox Cloud Gaming combined. GeForce Now is available on Windows, Mac, Android TV, Android, Safari, and iOS, with a Chrome browser version currently in beta.

The biggest difference between GeForce Now and other cloud gaming platforms is that you actually own your games on another platform. Stadia games only work with Stadia, and Xbox Cloud Gaming only supports whatever games are in the Game Pass lineup. With GeForce Now, you can still download and play the games you bought on Steam, the Epic Games Store, or anywhere else if you decide to buy a gaming PC later on or cancel your GeForce Now subscription.

## **Xbox Cloud Gaming**

Officially launched as part of Xbox Game Pass Ultimate in September 2020, Xbox Cloud Gaming should be a heavy contender later on in 2021. There are two components to this platform: One service for Xbox Game Pass and one for installed games.

The Xbox Game Pass portion provides a specific list of cloud-enabled games locked behind the Ultimate subscription. You can stream these games until Microsoft shuffles them out for other titles or purchase them at a discount and stream them indefinitely (more on that in a second).

Right now, the Xbox Game Pass component is limited. It's only compatible with mobile devices with Android 6.0 or newer and Bluetooth. Microsoft is currently working on a web app for Safari on Apple devices to skirt around the App Store limitations (just like Google Stadia). Support for Window 10 isn't expected to arrive until Spring 2021, while support for smart TVs and streaming sticks will be added later on.

The second component is Microsoft's Console Streaming service. Previously, Xbox owners could stream their owned and installed games to Windows 10 PCs and Android devices via the Xbox app (or the paid OneCast app on Apple devices), but only across the local network. Now, console owners can stream their games to client devices connected to any network, even cellular, so long as the game is installed on the home console.

# **2023 PLACEMENTS**

Campus placements provide the students with a foot-in-the-door opportunity, enabling them to start off their career right after they have completed their course curriculum. Furthermore, they get to interact and engage with the industry professionals during the placement drives, which further help them to lay a solid foundation for their prospective career in the future as they familiarize with potential contacts from their chosen career field.

The students of the Department of Computational Intelligence have excelled in the field of placements which is substantiated by the following accounts.

- RA2011033010086 Mr. Abhinav Agarwal from CSE (SE) got offer from Paypal for stipend of Rs 1,00,000, 34.4 LPA CTC and Stipend: 75,000p.m from Barclays.
- JP Morgan recruited RA2011047010095 LEELA RANI ALURU and RA2011033010113 Rohan Ajay Ramani for Stipend of RS. 70000 p.m.
  - RA2011026010167 KRITI KAKKAR, RA2011026010218 SAAHIR KHAN and RA2011026010270 Apeksha Mukherjee made it to Fractal Analytics for Stipend of 30000 p.m. and CTC: 10.25 - 14.25LPA.



- 9 students- Abhay Dixit, Krithika B, Saifeen Naaz, Yash Goel, Harshit Kochhar, Mehvish Ahmed, Rithika Varaganti, Sabarinaath S S S S, Madhav Khatoria secured Stipend: 75,000p.m at Barclays
- TANVI GUPTA, SHASHANK KUMAR, AKSHAY KRISHNA and Vansh Bhatia got placed in Fidelity.



01

**Dr.R Annie Uthra** published ,"Anomaly Detection in Machinery and Smart Autonomous Maintenance in Industry 4.0 During Covid-19".

**Dr.R Annie Uthra**, **Mrs. A.Jackulin Mahariba** published, "Development of Novel Ensembled Boosting Model (EBM) for Fall Detection",

02

**Dr.C.Lakshmi, Mr.Joseph James** published, "Improved Multi-Label Image Classification Performance using Supervised CNN-LSTM Deep Neural Network", .

03

**Dr.Maragatham G** Contributed a chapter for the book ," Smart Computing Technologies", Chapter 10 , titled "Implementation of Data based Modelling using Machine learning".

04

**Saad Yunus Sait** et al published "Survey on Artificial Intelligence-based Depression Detection using Clinical Interview Data",in 2022 3rd International Conference on Smart Electronics and Communication (ICOSEC),

05

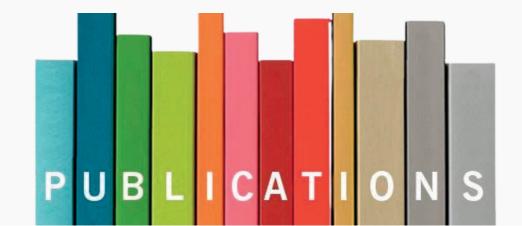
**Dr.M.S.Abirami** et al published, "Novel Multimodal Biometric Feature Extraction for Precise Human Identification", Intelligent Automation & Soft Computing, Tech Science Press, vol.36, no.2,

06

**T.John Berkmans, Dr.S.Karthick** published ,"A widespread survey on machine learning techniques and user substantiation methods for credit card fraud detection", International Journal of Business Intelligence and Data Mining. Volume 22,Issue 1-2,2023 pp 223–247.

07

**S. Samsudeen and G. Senthil Kumar** published, "A Data-Driven Predictive Model for Speed Control in Automotive Safety Applications", in IEEE Sensors Journal, vol. 22, no. 23,.



08

**Dr.Arivazhagan.N** et al published, "Blockchain based sensor system for Embedded IOT", Journal of computer information system, Jan 17 2023.

09

**Jothi, B.Jeyasudha, J** published , "Traffic Signs Recognition using Convolutional Neural Networks", MysuruCon 2022 - 2022 IEEE 2nd Mysore Sub Section International Conference, 2022.,

*10* 

**Jothi, B. Pushpalatha, M** published ,"Understanding trends in higher education student performance using machine learning techniques", MysuruCon 2022 - 2022 IEEE 2nd Mysore Sub Section International Conference, 2022.

**11** 

**J. Jeyasudha, Dr.G.Usha** published," A Smart and Secure IoT devices Using Machine Learning Algorithm", MysuruCon 2022 - 2022 IEEE 2nd Mysore Sub Section International Conference, 2022.

**12** 

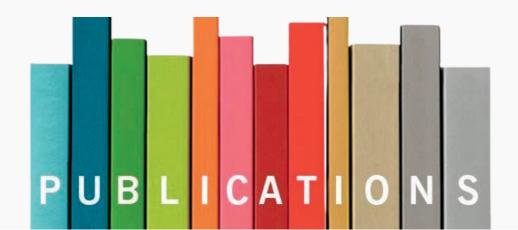
**Dr.S.Amudha** et al published, "A Significant Feature Selection to Improve the Accuracy of a Classification Algorithm for Steel Defect" published Journal paper in IEEE Expore on Jan 2023.

*13* 

**Dr.S.Amudha** et al published, "Review of Artificial Intelligent based Algorithm for Prediction of Polycystic Ovary Syndrome(PCOS) from Blood Samples", in IEEE Explore in Jan 2023.

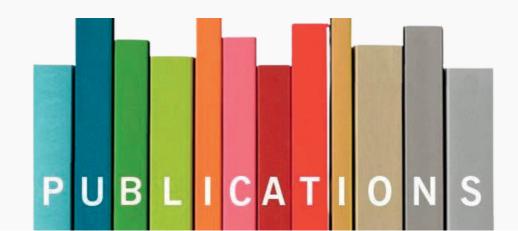
14

**A. Saranya** et al published ,"Cognitive Human Gait Analysis for Neuro-Physically Challenged Patients by Bat Optimization Algorithm", Journal of Reliable and Quality E-Healthcare, Volume 11, Issue 1, IGI Global.



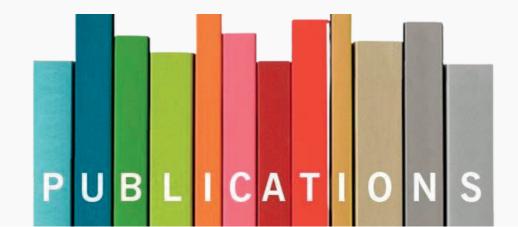
- 15
- T R Saravanan, J.Kalaivani, G.Nagarajan, "An optimal cluster based security and resilience of smart home environments using hybrid soft computing techniques," Computational Intelligence 2022.
- 16
- Dr.S.Sadagopan et al published," Propositional Inference for IoT Based Dosage Calibration System Using Private Patient-Specific Prescription against Fatal Dosages",
- 17
- Dr.Sridevi Ponmalar et al published, "Electronically Tunable Multifunction Current Mode Filter Employing Grounded Capacitors ", Inf. Midem-J. Microelectron. Electron.
- 18
- Dr.Sridevi Ponmalar et al published, "Dynamic Fusion of Text, Video and Audio models for Sentiment Analysis,"4th International Conference on Innovative Data Communication Technologies and application
- 19
- Dr.R.Beaulah Jeyavathana et al published ,"Pre-Trained Xception Modelbased Covid Detection using CXR Images", Proceedings of the International Conference on Automation, Computing and Renewable Systems(ICACRS
- 20
- Dr.Athira M. Nambiar et al published, "An overview of Data Warehouse and Data Lake in Modern Enterprise Data Management", Big Data and Cognitive Computing Journal, November 2022.
- **2**I
- Dr.T.Subha published book chapter titled and q Applications and implications of artificial intelligence and deep learning in computer vision and, in Deep Learning for Cognitive Computing Systems:

Technological Advancements and Applications,



- Ramaiyar Sundaram, M, Swamidason, ITJ, Sarveshwaran, V. Parkinson's disease detection using sea lion shuffled shepherd optimization assisted deep maxout network. Concurrency Computat Pract Expert.
  - Dr.S.Sadagopan et al published," Propositional Inference for IoT Based Dosage Calibration System Using Private Patient-Specific Prescription against Fatal Dosages",
- Sangeetha Francelin, Vinnarasi Francis and Prabaharan Gopi and Velliangiri Sarveshwaran and Ajitha Ponnupillai,"An Intelligent System Using Deep Learning-Based Link Quality Prediction and Optimization Enabled Secure Communication in UAV Network", Cybernetics and Systems,.
- Velliangiri S et al published,"Computational and Mathematical Methods in Medicine Glioma Brain Tumor Detection and Classification Using Convolutional Neural Network", Journal of Computational and Mathematical Methods in Medicine, Hindawi
- R. Babu, Prithi Samuel and K Jayashree published book chapter, " Cognitive Authentication for Smart Healthcare System" in the Book " Deep Learning for Cognitive Computing Systems:

  Technological Advancements and Applications,
- P. Ajmani, V. Sharma, P. Samuel, K. Somasundaram and V. Vidhya, " Patient Behaviour Analysis and Social Health Predictions through IoMT," 2022 10th International Conference on Reliability, Infocom Technologies and Optimization (Trends and Future Directions) (ICRITO),





React is a JavaScript library that was developed by Facebook and is used for building user interfaces. It's become incredibly popular in recent years due to its simplicity, versatility, and ability to handle complex applications.

So, why is React so important for web developers?

User Experience: React's component-based structure makes it easier to create dynamic, interactive and responsive user interfaces that provide a great user experience.

Reusability: React components can be reused across multiple pages and applications, making it easier and faster to build new features and maintain existing ones.

Virtual DOM: React uses a virtual DOM, which makes updates and renderings much faster and more efficient compared to traditional DOM manipulation.

Large Community: React has a large, active and supportive community that regularly contributes new features, bug fixes, and third-party libraries. This means that you have access to a wealth of resources and support as you work with React.

In conclusion, React is a must-have skill for modern web development, and it's worth investing the time to learn and master it. But more importantly, I encourage each of you to never stop learning and growing. The tech industry is constantly evolving, and staying ahead of the curve requires a passion for learning and a willingness to continuously adapt.

Remember, your potential is limitless, and I have no doubt that you will continue to make a positive impact in your careers and in the world. So, embrace the challenge and always strive to be the best version of yourself.

Thank you for your time, and I wish you all the best in your future endeavors.

# **PATENTS**

published

- 1)Dr.M.Uma published a patent titled "A SYSTEM FOR DRIVER DROWSINESS AND FATIGUE DETECTION AND A METHOD THEREOF" and A SYSTEM FOR IMMERSIVE LEARNING EXPERIENCE USING AUGMENTED REALITY AND A METHOD THEREOF" on Oct 2022.
- 2) Dr.M.S.Abirami published a patent titled "A MULTIMODAL BIOMETRIC SYSTEM FOR HUMAN RECOGNITION AND A METHOD THEREOF" on 13.1.2023.
- 3)Dr.B.Jothi and Dr.J.Jeyasudha published a patent titled "A IMAGE PROCESSING BASED SYSTEM TO DETECT THE FRAUDSTERS ENTERING THE BANKING ORGANIZATION OR ATM KIOSKS" on November 11th 2022.
- 4)Dr.K.Suresh published a patent titled "SDN Based Energy Efficient Routing Protocol for Acoustic Wireless Sensor Networks" published on Nov 2022.
- 5)Dr.M.Karpagam published a patent titled "Design system of Heart Disease Risk Prediction Supported Smart System using Machine learning" on Nov 2022.
- 6)Dr.U.Sakthi and Dr.Gopirajan PV published a patent titled "A Method for Managing the Issues in Human Resource Management using Artificial Intelligence", on Nov 2022.



On the occas<mark>ion, Publishing Offic</mark>er of World Union Book of Records, Sharifa Hanifa handed over a certificate to mark the participation of 12,900 people to create the World Record to MP and Founder Chancellor of SRM Group of Institutions, Dr.T. R. Paarivendhar.

# OUR STORY

Nearly 13,000 people took part in the SRM Pongal Festival held at SRM IST, Kattankulathur, making its entry into the World Union Book of Records.

Tamil Perayam, Directorate of Student Affairs and the Department of Physical Education and Sports of SRM IST came together to organize the SRM Pongal Festival 2023 in which students took part with enthusiasm.





In connection with the event, there was a line up of traditional percussion instruments like 'thaarai thappatai,' 'naadaswaram,', 'parai,' 'mayilaattam,' 'kuyilaattam,' 'kolaattam,' silambam,' that reflected the heroic sports, games and traditional arts of Tamil Nadu.

10 pots were lined up where the traditional sweet Pongal was cooked, prepared and distributed to everyone. Other events that continued as part of the events included Bharata Natyam, Yoga, classical and light music dance, rope pulling and stick fight.

We made it to SUN news! https://youtu.be/zGBQ4o2yv94?t=526



To take the message of the importance of the Pongal festival, that is unique to Tamil Nadu and to foster a sense of integration and brotherhood, the SRM Pongal Festival 2023 on such a large scale was held today in which nearly 13,000 people took part.

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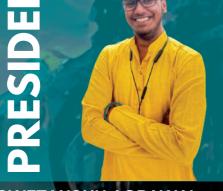


MS.C.G.ANUPAMA





MR.C.ARUN



SWETANSHU AGRAWAL



SAMUDRA BANERJEE







**DESIGNER** 



TA HRISHIKESH





**RITVEEK RANA** 

# உவப்பத் தலைக்கூடி உள்ளப் பிரிதல் அனைத்தே புலவர் தொழில்

It is pleasure to meet a scholar, A pain to part with him.



எல்லோரும் மகிழும் வகையிலே கூடியிருந்து,
"இனி என்று மீளக் கூடுவோம்" என்று
எண்ணும்படியாகப் பிரிதல்
கல்வியறிவினரது செயல் ஆகும்

It is the prowess of scholars that meetings bring delight And departures leave memories.