NEWS-LETTER

First Half 2022

Dr. Aparna Bannore
(HOD)
Department of
Computer Engineering

FROM THE HOD's DESK

Department of Computer Engineering of SIES GST started in year 2002 offers undergraduate programme in Computer Science where students are exposed to concepts of computer engineering to motivate their humanities, innovation, creative and problem solving abilities, intellectual honest and professional ethics, and capacity for teamwork in interdisciplinary, national and international environment. The students are nurtured to become better professionals in their career.

DEPARTMENT NEWSLETTER

SIES Graduate School of Technology
RISE WITH EDUCATION

COMPUTER ENGINEERING DEPARTMENT

SIES GRADUATE SCHOOL OF TECHNOLOGY, NERUL

VOLUME 6 ISSUE 1

MISSION

- To Impart quality education to meet the professional challenges in the area of Computer Engineering.
- To create an environment for research, innovation, professional and social development.
- To nurture lifelong learning skills for achieving professional growth.
- To strengthen the alumni and industrial interaction for overall development of students.

VISION

To be a centre of Excellence in Computer Engineering to fulfill the rapidly growing needs of the Society.

Program Educational Objectives (PEOs)

- Practice Computer engineering in core and muti-disciplinary domains.
- Exhibit leadership skills for professional growth.
- Pursue higher studies for career advancement.

Program Specific Outcomes (PSOs)

- To apply computational and logical skills to solve Computer engineering problems.
- To develop interdisciplinary skills and acquint with cutting edge technologies in software industries

FACULTY PROFILE

No	Name	Qualification	Designation	Area of Interest
1	Dr.Aparna Bannore	B.E(CSE) , M.E (CE), Ph. D	Professor	Cyber security and Signature security.
2	Dr. Rizwana Shaikh	B.E(I.T), M.E(CE), Ph.D	Associate Professor	Cloud Computing and Security
3	Dr. Deepti Reddy	B.Tech, M.E (CE), Ph.D	Associate Professor	Semantic web, Intelligent Tutoring System, Engineering Education, Educational Technology.
4	Dr. Varsha Patil	B.E, M.E (CE),Ph.D	Associate Professor	Image Processing, Data Mining, Machine Learning, Natural Language Processing
5	Mrs. Prachi Shahane	B.E(CSE) ,M.E (CE), Ph. D*	Assitant Professor	Artificial Intelligence, Internet Of Things
6	Mrs. Suvarna Chaure	B.E(CSE),M.E (CE), Ph. D*	Assitant Professor	Security
7	Mr. Sunil K Punjabi	B.E, M.E (CE)	Assitant Professor	Software Engineering
8	Mrs. Pranita Mahajan	B.E(CSE), M.E (CE)	Assitant Professor	Natural language processing, Machine Learning, Data Analytics.
9	Ms. Ujwala Ravle	B.E, M.E (CE), Ph. D*	Assitant Professor	Network Security, Machine Learning
10	Ms. Kalyani Pampattiwar	B.E. (CSE), M.E (CE), Ph. D*	Assitant Professor	Security, Data Mining

FACULTY PROFILE

No	Name	Qualification	Designation	Area of Interest
11	Ms. Namrata Patel	B.E., M.E (CE), Ph. D*	Assitant Professor	Web Mining
12	Ms. Kranti Bade	B.E.(IT), M.E(CSE)	Assitant Professor	Data Mining
13	Ms. Masooda Modak	B.Tech (IT), M.E (CE), Ph.D*	Assitant Professor	Learning Analytics, Data Mining, E-learning
14	Ms. Anindita A Khade	B.E, M.E (CE), Ph. D*	Assitant Professor	Machine Learning, Data Analytics, Data Mining
15	Ms. Aarthi Boyanapalli	B.E, M.E (CE), Ph. D*	Assitant Professor	Computer Network
16	Ms. Urvashi Patekar	B.E, M.E (CE)	Assitant Professor	Cyber Security And Block Chain
17	Ms. Kalyani Salvi	B.E. (CSE), M.E (CE)	Assitant Professor	Data Science
18	Ms. Rasika Malgi	B.E. (CSE), M.E (CE)	Assitant Professor	Data Science
19	Ms. Rakhee Das	B.E, M.E (CE)	Assitant Professor	Data Science
20	Ms.Poonam Jadhav	BE(IT),ME(IT), Ph.D*	Assitant Professor	Data Science, Artificial Intelligence
21	Ms. Rina Bora	BE(CE), ME (CE), Ph.D*	Assitant Professor	Artificial Intelligence, Web Programming
22	Ms. Simran Sharma	B.E, M.E (CE)	Assitant Professor	Machine Learning

NON TEACHING STAFF

Sr. No	Name	Roles
1	Mr. Srinivas B.	Lab-Attendent
2	Mr. Saikrishna J.	Network Administrator
3	Mr. Bhagyashal W.	Lab-Assistance
4	Mr. Sudhir P.	Lab-Assistance

CLASS STRENGTH

Year	Total Strength	Girls	Boys
SE	138	40	98
TE	106	37	69
BE	107	43	64

FACULTY ACHIEVEMENTS

BOOK CHAPTERS/PATENT/OTHERS

1. Dr. Aparna Banore, **Judge for "Avishkar convention in PG, PPG, Teachers category**".

2. Dr. Aparna Banore , "**Reviewer for TENSYM22 (IEEE symposium**)".

3. Dr. Aparna Banore , "**Syllabus designing in ME and BE revision R2019".**

4. Prof. Suvarna Chaure and Prof. Sunil Panjabi , **Filed Patent** on " **A LOW-DENSITY POLYETHYLENE (LDPE) SORTING SYSTEM".**

5. Prof.Kalyani Pampattiwar , **Submitted Book chapter** titled "**Security and privacy facets of EHR", Elsevier (In press).**

6. Prof. Anindita Khade , **Received copyright** on "**Detection on CKD stages using Squeezenet**" on 29-02-2022.

FACULTY ACHIEVEMENTS

PAPER PUBLICATIONS

1. Dr.Aparna Banore, published a paper "A Garbage Profiling System Using Mask R-CNN Deep Learning Algorithm", International Conference for Advancement in Technology (ICONAT), Jan-2022.

2. Dr.Rizwana Shaikh, Submitted paper in Blockchain Based Cloud storage of Patients Health Record,Delcon 2022.

3. Prof. Prachi Shahane, Presented paper on "Addressing Class Imbalance Problem in Chronic Kidney Disease", International Joint Colloquiums on Computer Electronics Electrical Mechanical and Civil – CEMC.

4. Prof. Prachi Shahane, Presented paper on " Desktop voice assistant using NLP ", 1st International Conference on Computational Intelligence for Engineering and Management Applications (CIEMA) – 2022.

5. Prof. Prachi Shahane, Published paper on "Medical data analysis and councelling using blockchain", in International Journal for Research in Engineering.

FACULTY ACHIEVEMENTS

PAPER PUBLICATIONS

6. Prof. Suvarna Chaure, Published paper on "Clinical Healthcare System using Datamining", IJREAM, May 2022.

7. Prof. Suvarna Chaure, Presented Paper on "Intelligent Forensics", IEEE CONIT on 24th June 2022.

8. Prof. Suvarna Chaure, Presented Paper on "Intelligent Forensics", IEEE CONIT on 24th June 2022.

9. Prof. Sunil Panjabi, Presented paper titled "Forensic Intelligence-Combining Artificial Intelligence with Digital Forensics", in IEEE , 2nd International Conference on Intelligent Technologies on 24-26 June 2022.

10. Dr. Varsha Patil, Presented Paper on, Plastic Picking Robot, International Conference on Trends in Engineering, Applied Sciences and Management IC-TEAM 2022,08th-09th April 2022.

FACULTY ACHIEVEMENTS

PAPER PUBLICATIONS

11. Dr. Varsha Patil, Eye Disease Classification using Deep Neural Network, International Conference on Trends in Engineering, Applied Sciences and Management IC-TEAM 2022,08th-09th April 2022.

12. Dr. Varsha Patil and Prof. Kranti Bade, Real-time Water Quality Management using IOT, International Conference on Trends in Engineering, Applied Sciences and Management IC-TEAM 2022,08th-09th April 2022.

13. Prof. Ujwala Ravle, published a paper on, Breast Cancer Prediction using Machine Learning Algorithm, ICSADL 2022- Springer.

14. Prof. Ujwala Ravle, Soil Monitoring and Fertilizer Recommendation System, IOSRJEN,June 2022.

15. Prof.Kalyani Pampattiwar, CBSOACH: design of an efficient consortium blockchain-based selective ownership and access control model with vulnerability resistance using hybrid decision engine, (In Forthcoming), IJCSE by Inderscience, SCI indexed.

FACULTY ACHIEVEMENTS

PAPER PUBLICATIONS

16. Prof.Kalyani Pampattiwar, An empirical evaluation of blockchain security models from a fuzzy statistical perspective, IJBC.

17. Prof. Namrata Patel, Attribute based privacy preservation, AIC June – 2022.

18. Prof. Masooda Modak, Recognition system for emotions from human speech, IEEE, IEEE 6th International Conference on Computing, Communication and Automation (ICCCA), Doi: 10.1109/ICCCA52192.2021.9666234.

19. Prof. Masooda Modak, Prof.Kalyani Pampattiwar and Prof. Namrata Patel, Depression Detection using ML, International Conference on Trends in Engineering, Applied Sciences and Management (IC-TEAM) to be held on 08th-09th April 2022 at St. John College of Engineering and Management, Palghar.

20. Prof. Rina Bora, Published paper on "Identification Of Tomato Leaf Disease Using Deep Learning Model ", In AIP proceeding. And Published paper on "Plant leaf disease detection using Deep Learning: A review", IEEE

STUDENT DEVELOPMENT PROGRAM (SDP)

Workshops/Seminars

1. Department has organized, **"Webinar on Soft Skills** ",dated 3-March-2022, for BE students.

2. Department has organized **,"Workshop on GitHub",** 22-Jan-2022, For SE, TE students.

3. Department has organized , National Level Poster Presentation on "**Data Privacy",** 28-Jan-2022, for SE,TE,BE students.

4. Department has organized , **"Robotic Process Automation Workshop"**, 12-Feb-2022, for TE Students.

5. Department has organized **,"Workshop on Python Basics and Big data Introduction",** 26-March-2022, For SE Students.
6. Department has organized , **"Technosus Competition",** 31 March-1 April-2022.

7. Department has organized **,"Innovations - National Level Project Competition",9 -April -2022.**

STUDENT DEVELOPMENT PROGRAM (SDP)

Value Added Courses

1. **Competitive coding for DSA**: The Department of Computer Engineering organized a Value added course on “Competitive coding for DSA” , in May-June 2022, for second year engineering students from all branches.

2. **Devops Technology:** The Department of Computer Engineering organized a Value added course on “Devops Technology” , in June 2022, for third year engineering students from all branches.

3. **ADVANCED HTML AND WEB TECHNOLOGIES**: The Department of Computer Engineering organized a Value added course on “ADVANCED HTML AND WEB TECHNOLOGIES” for the second year engineering students of all branches, for duration 21 June 2022 to 27 June 2022. Course was delivered by Prof.Prachi S,Prof Namrata,Mr.Chinmay Chandak(Alumni), Mr.Dhanajay ,Mr.Mithil(Alumni), Mr.Sayan,Mr.Wasim (Alumni).

STUDENT DEVELOPMENT PROGRAM (SDP)

Value Added Courses

4. **Ethical hacking**: The Department of Computer Engineering organized a Value added course on “Ethical hacking” for the Second year and third year engineering students from all branches, for duration 27 june 2022 to 2 july 2022. It is aimed to provide knowledge to the students on how to identify the security parameters and penetration level in any organization in an ethical manner and mitigating threats.

5. **Advanced Java :** The Department of Computer Engineering organized a Value added course on “Advanced Java Programming '' for the Second year and third year engineering students, for duration 25 Dec 2022- 29 Dec 2022. The course was delivered by faculty members of the computer engineering department and by industry resource person Mr.Piyush Atram,Tata Digital.

FACULTY DEVELOPMENT PROGRAM (FDP)

1. Department has arranged Faculty Development Program on **" Natural Language Processing"** on 4'th April2022.

FDP Attended by Faculty

Sr.No	Name of the faculty	Name of the FDP	FDP Duration	Organized By
1	**Prof. Prachi Shahane**	ATAL workshop on "Quantum Computing"	03-01-22 to 07-01-22	MET Institute Nashik
2	**Prof. Prachi Shahane**	EDP on fostering Start-up, Innovation and Entrepreneurship/Intrapreneurship " at	from 14/02/2022 to 18/02/2022	Andhra University
3	**Prof. Prachi Shahane**	Course on Natural Language Processing with Classification and Vector Spaces	3/4/2022(weeks course)	Coursera
4	**Prof. Prachi Shahane**	Udemy course on Data science Course2022:Complete Data Science Bootcamp	30 hrs	Udemy
5	**Prof. Sunil K Punjabi**	ATAL FDP on Design Thinking	31/12/22 to 4/1/22	ATAL
6	Prof. Suvarna Chaure	Udemy Course on "Machine Learning with Python"	---	---

FDP Attended by Faculty

7	**Prof. Ujwala Ravle**	FDP on "Advancement in Cloud Computing "	From 03-01-2022 to 08 - 01-2022.	---
8	**Prof. Poonam Jadhav**	FDP on "Data Science and Visualization Tools"	----	---
9	**Prof. Rina Bora**	FDP on "Data Science and Visualization Tools"	----	---

ARTICLE

Faculty Article

Effective Learning Analytics

Editor: Prof. Masooda Modak

Learning analytics is the measurement, collection, analysis and reporting of data about learners and their contexts, for purposes of understanding and optimizing learning and the environments in which it occurs. For ethical and legal reasons, it's crucial to guarantee that students with special needs can utilize technologies equally and aren't disadvantaged by the acquisition and use of their data. Here are eight ways institutions can make an effort to guarantee this.

1. Keep in mind that learning analytics is not evaluation.

It's important to keep in mind that evaluation and learning analytics are two different things. This is stated explicitly in the Jisc Code. The analysis of student participation in learning may theoretically be used to affect grades; this currently happens, for instance, when attendance at a specific percentage of lectures in a course is required. But I'm going to assume that these topics are kept apart and that learning analytics refers to new kinds of analysis that expand on information on things like student involvement and demographics. Rather than assessing students, the goal should be to help them. Students with disabilities shouldn't be concerned that analytics will directly affect how their examinations are marked if institutions follow this divide.

2. Refrain from branding people and promoting prejudice and preconceptions.

Making ensuring that learning analytics does not negatively affect how staff or other students perceive or treat impaired individuals is a more pressing concern. There are several scenarios that could result in this. For instance, a tutor dashboard that emphasises the student's impairment can give it an excessive amount of importance. On the other side, if the student has disclosed a disability to the institution, suitable accommodations must be offered. One technique to guarantee fair and helpful treatment is to present the information on a staff dashboard.

Faculty Article

3. Preserve the privacy of students with disabilities.

Institutions have a responsibility to maintain the privacy of information about students' disabilities. Learning analytics systems must uphold this protection and make sure that only those with a legitimate need to know about them are allowed access. Students also have the right to anticipate that these facts will be kept on file at the school and won't be disclosed to outside parties, such as an employer, unless they specifically consent.

4. Handle the analytics' assumption of disability correctly

It's likely that learning analytics could unintentionally identify some problems. For instance, a student might display traits of a dyslexic learner, which the analytics programmed subsequently draws attention to. Additionally, it's possible that the student is unaware of their particular handicap, which the software has just discovered. Such analysis systems are not now employed frequently. If they do, then the necessary regulations must be put in place, and staff members must receive training on how to counsel students.

5. Watch careful that the analytics don't unfairly target pupils with disabilities.

Systems for learning analytics may also be able to spot the engagement patterns of students with disabilities, even when those children are actually on track academically. A student might, for instance, be limited in her ability to attend lectures due to a disability. Analytics based on attendance monitoring data may indicate that she is at risk, even though she may already be using a different approach to meet any course requirements.

A personal tutor could mediate any interventions to make sure that the circumstances of each student are taken into consideration. It could be challenging to ensure that pupils are always directed appropriately if any automatic alerts are sent out to them.

Faculty Article

Although algorithms could be created to account for student disabilities, it would be impossible to perfectly fine-tune the predictive models given the variety of situations that each student faces, the multiple disabilities that many students experience, and the fact that many students do not declare disabilities. In such cases, offering advice to students may be the best course of action. For instance, they might be told that predictions aren't always correct and that they should speak with their individual instructor if they have any worries.

6. Use analytics to find modules that seem to have accessibility problems.

It may be possible to determine how accessible a module is by looking at the participation and performance of impaired students. At the Open University, Cooper, Ferguson, and Wolff analyzed the completion rates of disabled and non-disabled students and discovered some modules where impaired students drop out at disproportionately high rates. In the future, they suggest performing critical learning path analyses in an effort to identify the specific nature of the accessibility problems that are causing attrition.[1]

7. Ensure that analytics geared towards students are available.

Any software, dashboards, or websites geared towards students should have accessibility features. These could include the option to utilize screen reader software, avoid using color schemes that are inappropriate for people who are color blind, or raise font size. It might be required to offer web-based versions of student apps. Web accessibility guidelines are provided by the World Wide Web Consortium (W3C).

8. Be certain that interventions are phrased properly.

Learning analytics statements to students may affect their motivation and future academic progress depending on the language and tone used. Demotivating messages may be more effective on students who are already struggling with specific problems, such as depression, making it even more important for the institution to make sure that treatments are handled delicately for all students.

STUDENT ACHIEVEMENTS

Sr.No	Name of the student	Name of the achievement	SE/TE/BE
1	Samiksha Iyengar	Consolation in Cartooning-MU Youth festival	SE
2	Sridhar Ananyaa	FIRST RANK in Indian Classical Vocal Solo competition- MU Youth Festival	TE
3	Ramaswamy Shabarish	THIRD RANK in Elocution (Marathi or Hindi or English)-MU Youth Festival	BE
4	Anirudh Belwadi	Bagged "Best Project to solve a big AEC problem" award in AEC Hackathon, Copenhagen, Denmark	BE
5	Varun Sreedhar Srikrishna V Sanjana Kumar	2nd prize in ByteCamp'22	BE
6	Sharan Murali	Presented and published the paper titled “Agricultural Supply System with permissioned networks through Hyperledger framework”, in IC-TEAM 2022	BE
7	Samiksha Iyengar	Completed Frontend development training in Technical Coding Research Innovation	SE

INTERNSHIP & PLACEMENTS

INTERNSHIPS

Students are always proactively participating in the online and offline internship programs. College also provides internship opportunities through various student development programs on recent technologies. SE and TE students participate in such SDPs .

Internship is provided on **Software Design Skills, Blockchain Technology, Network Security & Ethical Hacking, Advanced HTML and Web Technology, Data Science Using R, Advanced C Programming, Web Development Technologies, Modelling Robot Kinematics**

Students have completed internship program from various government aw well as private organization like Cloud Counselage Pvt. Ltd., Smart bridge, DXC Technology, Denkali, LM UX Innovates, Indian Oil Corporation, KPMG.

INTERNSHIP & PLACEMENTS

PLACEMENTS

Computer department placement is consistently good. Students are placed in various esteemed companies. Their selection is through **aptitude test, programming test, group discussion and technical interviews.**

In this **academic year 2021-2022**, students are placed in companies like **ConnectWise, Reliance jio, Zeus learning, Link-group, NewGen Technologies, LTI, TCS, CAPGEMINI, TECH Mahindra, Wipro, Codearray, GEP, NSEIT, Ugam Solutions, Evosys, XORIANT, HEXAWARE,PERKIN ELMAR, Neosoft, Quinnox, Ideaforge, INFOSYS, Xoriant, HDFC, CRMNext, Acty Systems, Selec Controls Pvt. Ltd, Quinnox Consultancy, Zensar, PerkinElmer, Kotak Life , Survey Sparrow, Impact sure, FYNDNA, CitiusTech, Deloitte India, ICICI Prudential , Scientist Technologies, Accelya, etc.**

INTERNSHIP & PLACEMENTS

PLACEMENTS

Sr. No	Batch	Total strength	Eligible	Placed
SH 2021	Batch 2022 passout	107	94	50
FH 2022	Batch 2022 passout	107	94	29
				79

STUDENT TOPPERS

S.E. – FIRST HALF 2020 (Semester IV)

Overall Toppers

Sem	Rank	Name of the Student	Roll No	Percentage/ CGPI
IV	1	ABHISHEK ESAKKIAPPAN	119A1002	10
IV	1	ADITYA KRISHNA	119A1003	10
IV	1	ADITYA RAMAKRISHNAN	119A1004	10
IV	1	AISHWARYA VELUMANI	119A1005	10
IV	1	AKSHAT VIMAL RAWAT	119A1006	10
IV	1	ANANYA LAKSHMANAN	119A1008	10
IV	1	ANANYAA SRIDHAR	119A1009	10
IV	1	ANUSHIKA BALAMURGAN	119A1012	10
IV	1	KOMBE AYUSHI RAJESH	119A1013	10
IV	1	BHAMARE VEDANT NARENDRA	119A1014	10
IV	1	BORKAR ANAND PRASHANT	119A1015	10
IV	1	CHAURASIYA SAMPRIT JITENDRA	119A1016	10
IV	1	CHETTIYAR SRIVARI CHANDRABABU	119A1017	10
IV	1	DESHMUKH MINOTI MINAR	119A1018	10
IV	1	DESHMUKH SUCHIT SURESH	119A1019	10
IV	1	DHAPOLA YASH LALITSINGH	119A1020	10
IV	1	SUVARNA DHRUV SANJEEV	119A1021	10
IV	1	BAWASKAR ESHA PRATIM	119A1022	10
IV	1	GAWAS PRATHAMESH SHRIPAT	119A1024	10
IV	1	BHARGAVA ISHITA KAPIL	119A1026	10
IV	1	IYER KARTHIK KRISHNAN	119A1027	10
IV	1	IYER SHRUTI SURESH	119A1028	10
IV	1	JAIRAJ MAHADEV	119A1029	10
IV	1	IYER JANANI KUMARAGURUBHARAN	119A1030	10
IV	1	JAWALIKAR NIRANJAN AVINASH	119A1031	10
IV	1	K GAURI	119A1032	10
IV	1	MORASKAR SARVESH SANTOSH	119A1046	10
IV	1	PATIL ANIRUDDHA SHRIKANT	119A1056	10

STUDENT TOPPERS

S.E. – FIRST HALF 2022 (Semester IV)

Subject Toppers

Sem	Rank	Name of the Student	Ssubject	Percentage/CGPI
IV	1	BHARGAVA ISHITA KAPIL	EM-IV	100
IV	2	MAPARI ABDULLAH KADAR		99
IV	1	ADITYA KRISHNA	AOA	92
IV	1	DALVI SANDESH SANTOSH		91
IV	2	AISHWARYA VELUMANI		90
IV	2	MUKUNDAN DEVI		90
IV	1	IYER JANANI KUMARAGURUBHARAN	DMBS	92
IV	2	DESHMUKH MINOTI MINAR		90
IV	1	THEVAR ESAKKIAPPAN MURUGAN	OS	96
IV	2	SNEHAL HANAMANT JADHAV		95
IV	2	SHARDUL GORE		95
IV	2	SRUTHISRI VENKATESWARAN		95
IV	1	PADAYACHI VASU KRISHNAMURTHI	MP	94
IV	2	SRUTHI PANKAJAKSHAN		92
IV	2	RISHABH SURESH SINGH		92
IV	2	SNEHA SHAJI		92
IV	2	SINGH KOMAL RAJESHWAR PRASAD		92
IV	2	FALMARE RUTUJEET BHAGVANT		92

STUDENT TOPPERS

B.E.- FIRST HALF 2022 (Semester VIII)

Overall Toppers

Sem	Rank	Name of the Student	Roll No	Percentage/CGPI
VIII	1	Shraddha Naik	-----	9.84
VIII	2	Shrvya Manety		9.68

SUBJECT TOPPERS

Sem	Rank	Name of the Student	Subject	Percentage /CGPI
VIII	1	Naik Shraddha	DSP	76
VIII	2	Chaudhary Bhawana		72
VIII	1	Munghate Manjiri	CSS	68
VIII	2	Kale Shruti		65
VIII	2	Shrvya Manety		65
VIII	1	Bhandary Sushruth	AI	67
VIII	2	Rane Sandeep		66

ARTICLE

Student Article

Reinforcement learning:

Editor: Mst. Sufyain Posharkar-SE-CE

Reinforcement learning, or RL, is a type of machine learning that gives agents feedback in the form of rewards or punishments so that they can learn by trial and error. RL agents have been able to achieve impressive results in a variety of applications thanks to significant advancements in reinforcement learning over the past few years. The creation of Deep Reinforcement Learning (DRL) was one of the most significant advancements in RL. Agents can learn more complex behavior's and perform better thanks to this method, which combines deep neural networks with traditional reinforcement learning algorithms. The creation of convolutional and recurrent neural networks, for instance, in the field of deep learning made this breakthrough attainable.

An example of an RL agent that makes use of DRL is Chat-GPT, an Open AI-developed large language model. Chat-GPT can respond to a wide range of prompts in a manner that is comparable to that of a human because it was trained on a large amount of text data. Using RL, Chat-GPT generates responses that are both informative and fluent. The RL agent chooses the best response based on the reward it receives from the user's feedback when they input a prompt. Meta-learning, which entails instructing an RL agent on how to learn, is another recent development in the RL field. By leveraging its previous experience, meta-learning enables an agent to quickly adapt to new tasks or environments.

Student Article

This has important repercussions for robotics and other fields where agents need to quickly adjust to new circumstances. Multi-agent RL, which entails teaching multiple agents to cooperate with one another in a coordinated manner, is yet another important area of RL research. This is a difficult problem because the agents need to learn how to communicate and work together well to achieve a common objective. However, recent advancements in multi-agent RL have demonstrated promise for robotics and autonomous driving.

In conclusion, breakthroughs in DRL, meta-learning, and multi-agent RL have significantly improved the field of reinforcement learning in recent years. RL agents have been able to achieve impressive results in a variety of applications thanks to these advancements, which hold promise for further development. One example of how RL can be used to create intelligent agents that are able to communicate with humans in a natural and intuitive way is ChatGPT.

EDITORIAL BOARD

Prof. Reshma R Koli

Editorial Board:

- **Dr. Aparna Bannore [HoD]**
- **Mrs. Reshma Koli**
- **Students Member: Mst.Ganeshraman Pillai**

Editorial board is glad to release the current issue of our Department Newsletter May 2022. We appreciate the efforts taken by the editorial board in compiling useful information & activities by department. The contribution and dedication of faculty members, students is continuously helping the newsletter in stepwise manner for achieving new milestone.

Newsletter divulge that the department is trying hard to achieve various dimensions such as academic, co-curricular and extra co-curricular activities.