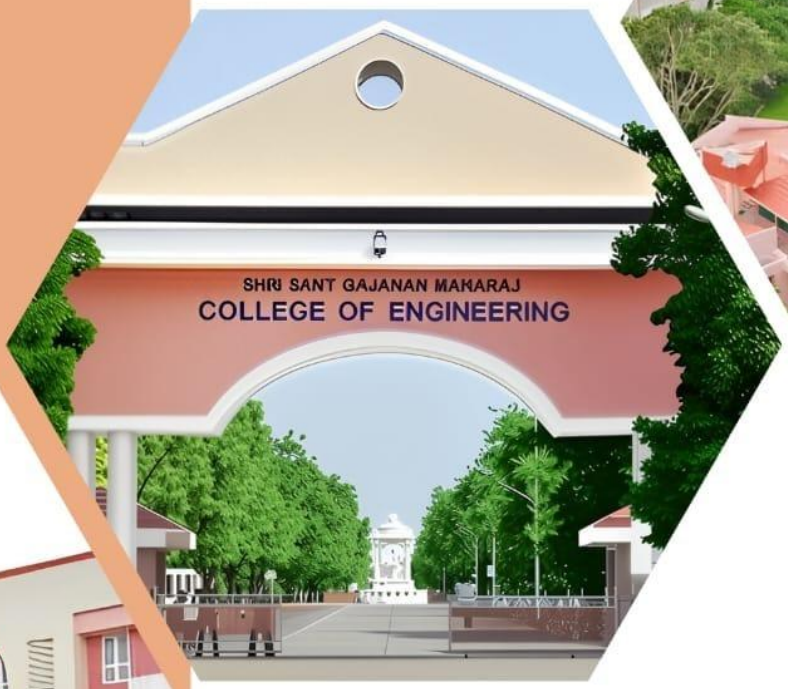
Shri Sant Gajanan Maharaj
College of Engineering
SHEGAON, MAHARASHTRA, INDIA



SRUJJAN

DEPARTMENTAL MAGAZINE OF ELECTRONICS AND TELECOMMUNICATION ENGINEERING

2023-24

DEPARTMENT VISION

To impart quality education and excel in Electronics and Telecommunication Engineering research to serve the global society.

DEPARTMENT MISSION

- To develop excellent learning centre through continuous interaction with Industries, R&D centres and Academia.
- To produce competent, entrepreneurial and committed Electronics and Telecommunication Engineers.
- To develop state-of-the -art infrastructure, centers of excellence and to pursue research of global and local relevance.
- To inculcate ethical, spiritual and human values to serve the global society.

PROGRAM EDUCATIONAL OBJECTIVES (PEOS)

1. To produce Electronics & Telecommunication engineers with a strong foundation of Mathematics, Science and Technology to full fill needs of society.

2. To enable students to innovate design, simulate, develop, analyze and test hardware and software components for offering solutions to real life situations using state-of-the-art infrastructure and R&D facilities.

3. To nurture students with professional attitude, leadership, entrepreneurship, effective communication, teamwork & multi-disciplinary approach to serve in national and multinational organizations.

4. To inculcate ethical, moral and environment friendly values in students.

FROM THE HOD'S DESK

"Progress is born from the willingness to embrace change and the passion to innovate."

It gives me immense pride to present the 2023–2024 edition of SRUJJAN, the annual magazine of the Electronics & Telecommunication Engineering Department. This publication is a reflection of our department's vibrant academic culture, technical excellence, and the creativity of our students and faculty.

This academic year has been marked by outstanding achievements. Our students have not only excelled in academics but have also demonstrated commendable performance in research, national-level technical events, internships, and placements. The consistent efforts of our faculty in guiding students through workshops, projects, and innovations have been instrumental in driving our department forward.
Our department continues to grow as a hub of innovation and learning, integrating emerging technologies such as AI, IoT, embedded systems, and communication technologies into our curriculum and student activities.

SRUJJAN continues to serve as a creative platform for our students, offering them a space to express their talents, ideas, and technical explorations. It also stands as a testimony to the teamwork, dedication, and passion that define our department's ethos.

I take this opportunity to thank all the contributors, editorial team members, faculty coordinators, and students who have made this magazine a success. May this edition inspire many more to explore, innovate, and excel.

Best wishes to all !

Dr. M. N. Tibdewal
Head Of the Department,
Electronics & Telecommunication.

EDITORIAL MESSAGE

With great enthusiasm and pride, we present the 2023–2024 edition of SRUJJAN, the annual magazine of the Electronics & Telecommunication Engineering Department. This magazine stands as a vibrant reflection of the department's academic accomplishments, technical advancements, creative endeavors, and collaborative spirit.

Throughout this academic year, our department witnessed an inspiring blend of innovation, learning, and participation. From technical workshops and guest lectures to interdisciplinary projects and competitive events, students and faculty worked hand-in-hand to achieve excellence. The rise in research contributions, industry collaborations, and successful placements further adds to our department's growing reputation.

SRUJJAN provides a platform to showcase the creativity, intellect, and passion of our students and faculty. Within these pages, you will find an exciting mix of articles, poems, technical insights, project highlights, and event memories, all curated with care and creativity.

We are deeply grateful to Dr. M.N.Tibdewal , our HOD, for his unwavering guidance and support. We also sincerely thank Prof. Sanjay Satal, our faculty coordinator, and all the mentors who stood behind the scenes ensuring quality and consistency.

We hope this edition not only captures memories but also inspires future innovation and excellence.

Happy Reading!

— Editorial Team, SRUJJAN

TEAM SRUJJAN
(2023-24)

POST	*NAME*
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Editor in Technical	Deep Rathod (1U)

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Achievements of the Department

OVERVIEW

The **Electronics & Telecommunication Engineering Department** at **Shri Sant Gajanan Maharaj College of Engineering, Shegaon**, is a key academic pillar offering **B.E., M.E., and Ph.D. programs**. The department is known for its academic excellence, qualified faculty, and state-of-the-art laboratories.

📌 **Department Snapshot:**

- ✅ **22 Faculty Members** (8 with Ph.D., 8 pursuing Ph.D.)
- ✅ **6 Laboratory Assistants & Office Staff**
- ✅ **8 Support Staff**
- ✅ **442 UG & PG Students** and **9 Ph.D. Scholars**
- ✅ **University-Recognized Research Laboratories**
- ✅ **NBA Accreditation** received for the period **2019–2025**

ACADEMIC & RESEARCH ACHIEVEMENTS

📌 **Faculty Excellence:**

- ✓ Faculty members actively contributed through **quality teaching**, **research**, and **industry engagement**.

- ✓ Served as **Deans**, **project guides**, and resource persons at reputed institutions.
- ✓ Several proposals submitted to **AICTE & MSME** for funding support.

📌 **Student Success:**

- ✓ Students participated in **GATE, CAT**, and other national-level competitive exams.
- ✓ **18 students** completed **internships** in recognized industries.
- ✓ Final-year result: **87.32% pass rate**, with **7 students securing distinction**.

📚 **Research Contributions**

- ✓ Multiple **research papers published** in reputed **national and international journals/conferences**.
- ✓ Senior faculty delivered **expert lectures** and acted as **reviewers/judges** at technical events.
- ✓ Continuous growth in **interdisciplinary student projects** under experienced faculty mentorship.

WORKSHOPS, TRAININGS & INDUSTRIAL COLLABORATIONS

The department conducted a variety of **skill-building and**

academic programs:

- ✓ Organized **10+ technical workshops/webinars** for students, faculty, and staff (both online & offline).
- ✓ Topics included **Basic Electronics, PCB Design, Communication Tools, and Advanced Circuit Simulation**.
- ✓ Strong engagement with **industry professionals** and domain experts.
- ✓ Students participated in **mini-project competitions, soft-skill sessions, and tool training modules**.

PLACEMENTS & INDUSTRY LINKAGES

- ✓ **98 final-year students** successfully placed in **leading national and multinational companies**.
- ✓ Top recruiters included **TCS, Wipro, Capgemini, Infosys, HDFC Life, BYJU'S**, and more.
- ✓ Students engaged in **industry-relevant and interdisciplinary projects**.
- ✓ Strong alumni network and consistent collaboration with industries for internships and placements.

मराठी

विभाग

कविता

पुस्तकांचे गाव

एका गावी पुस्तकांची वस्ती,
प्रत्येक घरात ज्ञानाची मस्ती.
उघडता पान, भेटे नवी दुनिया,
अक्षरांच्या जगात रमते ही मनिया.

कुठे इतिहासाची पाने फडफडती,
कुठे विज्ञानाची रहस्ये उलगडती.
कथा-कवितांचा जणू मेळा भरे,
प्रत्येक पुस्तक एक नवा मित्र करे.

वृद्धांपासून ते लहानग्यांपर्यंत,
सगळ्यांनाच पुस्तकांचा लळा.
वेळेचे बंधन नसते कोणाला,
ज्ञानसागरात डुंबण्याचा मिळाला लळा.

असे हे पुस्तकांचे सुंदर गाव,
जिथे शब्दांची फुलते बाग.
जाऊया कधीतरी भेटायला त्याला,

मिळेल जीवनाला ज्ञानाचा धाग.

आषाढी वारी

पंढरीची वारी, निघाली दिंडी,
मुखी विठ्ठल नाम, ओठी अभंग गुंफी.
पताका खांद्यावर, टाळ मृदंगाचा नाद,
भक्त निघाले पंढरीला, हरिनामाचा छंद.

उन्हाळ्याचा ताप, पायांना फोड,
तरी भक्तांची चाल अविरत.
श्रद्धेचा सागर, हृदयात उसळे,
विठ्ठल भेटीची आस मनात.

गावोगावचे वारकरी जमले,
एकत्रित झाले भक्तीच्या रंगात.
भेदभाव विसरून सारे चालले,
विठ्ठल माझा सोबती, या विश्वासात.

चंद्रभागेच्या तीरी लागली पंक्ती,
धन्य झाले डोळे विठ्ठला पाहून.
माझी वारी सफल झाली आज,
आनंदाश्रू आले नयनी दाटून.

तंत्रज्ञानाचा मित्र

आला मित्र नवा, हातात यंत्र घेवूनी,
बोटे फिरता क्षणात, दाखवी दुनिया जननी.
ज्ञानाचा सागर हा, माहितीचा खजिना,
शिकायला मिळे यातून, रोज नवा नमुना.

दूरचे आणतो जवळ, आवाज ऐकवतो स्पष्ट,
चित्र दाखवतो सुंदर, भूतकाळ करतो दृष्ट.
वेळेची बचत करतो, कामे करतो झटपट,
माणसाच्या मदतीला, हा तंत्रज्ञानाचा पट.

खेळणी बनतो लहानग्यांचा, करमणूक देतो मोठी,
वृद्धांनाही जोडतो, नसते आता कुणाची तुटी.
पण जपायला हवे त्याला, व्यसन नको लागू नये,
माणुसकीचा स्पर्श त्यात, कधीही कमी होऊ नये.

हा मित्र आहे शक्तीचा, विकासाचा आधार,
योग्य वापर केला तर, जीवनाला देतो आकार.
चला तर मग शिकूया, याच्या साथीने पुढे,
नवीन युगाच्या वाटेवर, आत्मविश्वासाने जुडे.

लेख

जलव्यवस्थापन आणि महाराष्ट्राची गरज

महाराष्ट्र एक कृषिप्रधान राज्य असून येथील अर्थव्यवस्था मोठ्या प्रमाणात पावसावर अवलंबून आहे. अनियमित पाऊस, वाढती लोकसंख्या आणि औद्योगिकीकरण यामुळे जलव्यवस्थापनाचे महत्त्व अधिक वाढले आहे. पाण्याची उपलब्धता आणि त्याचे योग्य नियोजन ही आज महाराष्ट्रासमोरची एक मोठी आणि गंभीर समस्या आहे. राज्यातील अनेक भागांमध्ये पिण्याच्या पाण्याची आणि शेतीसाठी पाण्याची तीव्र टंचाई जाणवते. पारंपरिक जलस्रोत आटत चालले आहेत आणि भूजल पातळी घटत आहे. यामुळे शेती उत्पादन घटले आहे आणि ग्रामीण भागातील लोकांच्या जीवनावर नकारात्मक परिणाम झाला आहे.

या परिस्थितीत जलव्यवस्थापनाचे महत्त्व अनमोल आहे. पावसाचे पाणी जास्तीत जास्त प्रमाणात साठवणे, अस्तित्वातील जलस्रोतांचे संरक्षण करणे आणि पाण्याचा कार्यक्षम वापर करणे आवश्यक आहे. यासाठी धरणे, तलाव आणि बंधारे यांची योग्य देखभाल आणि नवीन जलसंधारण प्रकल्पांची अंमलबजावणी करणे गरजेचे आहे. शेतीमध्ये सूक्ष्म सिंचन पद्धती (ठिबक सिंचन आणि तुषार सिंचन) वापरणे पाण्याचे अपव्यय टाळण्यासाठी अत्यंत महत्त्वाचे आहे. शेतकऱ्यांमध्ये जल व्यवस्थापनाबद्दल जागरूकता निर्माण करणे आणि त्यांना आधुनिक तंत्रज्ञानाचा वापर करण्यास प्रोत्साहित करणे आवश्यक आहे.

औद्योगिक क्षेत्रातील पाण्याचा पुनर्वापर करणे आणि पाण्याची बचत करणे हे देखील

महत्त्वाचे आहे. कारखान्यांमध्ये पाणी व्यवस्थापनाचे कठोर नियम आणि उपाययोजना लागू करणे आवश्यक आहे.

शहरांमध्ये पाण्याची मागणी वाढत आहे, त्यामुळे तेथे गळती थांबवणे आणि पाण्याचा कार्यक्षम वापर करणे महत्त्वाचे आहे. नागरिकांमध्ये पाणी बचतीची सवय रुजवण्यासाठी जनजागृती करणे आवश्यक आहे.

जलव्यवस्थापनात लोकसहभाग अत्यंत महत्त्वाचा आहे. स्थानिक पातळीवर जल व्यवस्थापन समित्या स्थापन करून लोकांना पाणी व्यवस्थापनाच्या प्रक्रियेत सहभागी करणे आवश्यक आहे. पाण्याच्या वापराचे नियम आणि त्याचे महत्त्व लोकांना समजावून सांगणे गरजेचे आहे.

महाराष्ट्र सरकारने जलव्यवस्थापनासाठी ठोस धोरणे आखावी आणि त्यांची प्रभावी अंमलबजावणी करावी. जलसंधारण प्रकल्पांना प्रोत्साहन द्यावे आणि पाण्याच्या गैरवापरावर नियंत्रण ठेवावे. भविष्यातील पाण्याची गरज लक्षात घेऊन दीर्घकालीन योजना तयार करणे आवश्यक आहे.

अखेरीस, जलव्यवस्थापन ही केवळ सरकारची जबाबदारी नसून प्रत्येक नागरिकाची जबाबदारी आहे. पाण्याचे महत्त्व ओळखून त्याचा जपून वापर करणे आणि इतरांनाही त्यासाठी प्रेरित करणे हे आजच्या काळातील सर्वात मोठे कर्तव्य आहे

महाराष्ट्रातील पर्यटन: संधी आणि आव्हाने

महाराष्ट्र हे एक समृद्ध सांस्कृतिक आणि नैसर्गिक वारसा असलेले राज्य आहे. येथे ऐतिहासिक किल्ले, लेणी, सुंदर समुद्रकिनारे, घनदाट जंगल आणि धार्मिक स्थळे आहेत, जे पर्यटकांना आकर्षित करतात. पर्यटन हा राज्याच्या अर्थव्यवस्थेचा एक महत्त्वाचा भाग आहे आणि यात वाढ होण्याची मोठी क्षमता आहे.

महाराष्ट्रामध्ये पर्यटनासाठी अनेक संधी उपलब्ध आहेत. पश्चिम घाटातील निसर्गरम्य दृश्ये, कोकणातील शांत समुद्रकिनारे, अजिंठा आणि वेरूळची जागतिक वारसा स्थळे, पुणे आणि मुंबईसारखी आधुनिक शहरे, आणि अनेक धार्मिक स्थळे पर्यटकांना विविध अनुभव देतात. साहसी पर्यटनासाठीही येथे अनेक वाटा आणि स्थळे आहेत.

परंतु, या संधींबरोबरच काही आव्हाने देखील आहेत ज्यांचा सामना करणे आवश्यक आहे. अनेक पर्यटन स्थळांवर पायाभूत सुविधांची कमतरता आहे, जसे की चांगले रस्ते, निवास व्यवस्था आणि स्वच्छतागृहे. पर्यटकांना माहिती देण्यासाठी आणि मार्गदर्शन करण्यासाठी प्रशिक्षित कर्मचाऱ्यांचीही गरज आहे.

राज्यातील पर्यटन क्षेत्राला सुरक्षित आणि सुलभ बनवणे महत्त्वाचे आहे. वाहतूक व्यवस्था सुधारणे, कायदा आणि सुव्यवस्था राखणे, आणि आपत्कालीन परिस्थितीत मदत पुरवणे आवश्यक आहे. तसेच, पर्यटन स्थळांची स्वच्छता आणि पर्यावरणाची काळजी घेणे देखील खूप महत्त्वाचे आहे, जेणेकरून या स्थळांचे नैसर्गिक सौंदर्य टिकून राहील.

पर्यटनाच्या माध्यमातून स्थानिक लोकांना रोजगार मिळवण्याच्या संधी निर्माण करणे आवश्यक आहे. होमस्टे योजना, स्थानिक खाद्यपदार्थ आणि हस्तकला यांना प्रोत्साहन देऊन ग्रामीण भागातील अर्थव्यवस्था सुधारता येऊ शकते. पर्यटन विकास योजनांमध्ये स्थानिक समुदायांचा सहभाग महत्त्वाचा आहे.

महाराष्ट्रामध्ये इको-टूरिझम आणि सांस्कृतिक पर्यटनाला प्रोत्साहन देण्याची मोठी क्षमता आहे. निसर्गाचे संरक्षण करत आणि स्थानिक संस्कृतीचा आदर करत पर्यटन विकसित करणे हे एक शाश्वत आणि जबाबदार दृष्टिकोन असेल. यासाठी योग्य नियोजन, गुंतवणूक आणि जागरूकता आवश्यक आहे.

महाराष्ट्रातील पर्यटन क्षेत्राला जर योग्य दिशा मिळाली आणि आव्हानांवर मात केली, तर ते राज्याच्या विकासात आणि रोजगारात महत्त्वपूर्ण योगदान देऊ शकते. गरज आहे ती एकत्रित प्रयत्नांची आणि दूरदृष्टीची.

हिंदी

विभाग

कविताएँ

बचपन के दिन

वो कागज़ की नाव और बारिश का पानी,
वो दादी की कहानी, नानी की जुबानी।

वो टूटी सी साइकिल, गलियों में घूमना,
हर पल था सुहाना, हर मौसम रंगीना।

वो दोस्तों की टोली, हर खेल निराला,
कभी मिट्टी के घरौंदे, कभी तारों का उजाला।

वो शरारतें करना, फिर डांट भी सुनना,
गुजर गया वो बचपन, अब यादें हैं बुनना।

वो पेड़ों पर चढ़ना, फल तोड़ के खाना,
वो तितली के पीछे, दीवाना सा भागना।

वो मेले में जाना, और गुब्बारे फुलाना,
वो भोली सी दुनिया, वो प्यारा जमाना।

अब यादें ही बाकी, उस जीवन की रेखा,
वो हंसी, वो मस्ती, वो हर पल बेफिक्रा।

कहाँ खो गया वो पल, वो मासूम चेहरा,
बचपन के दिन जैसे, एक मीठा सा सपना।

प्रकृति का संदेश

ये नदियाँ, ये झरने, ये पर्वत महान,
प्रकृति का हर रूप, अद्भुत वरदान।

ये पेड़ और पौधे, ये फूलों की रंगत,
जीवन का हर कण, सुंदरता से संगत।

ये पक्षियों का कलरव, ये हवा की सरसराहट,
हर ध्वनि में छिपी है, जीवन की आहट।

ये सूरज की किरणें, ये तारों की छाया,
हर पल बदलता है, प्रकृति का माया।

मत काटो ये जंगल, मत दूषित करो पानी,
प्रकृति का करो सम्मान, यही है जिंदगानी।

अगर छेड़ोगे इसको, तो आएगा तूफान,
बचा लो इसे मिलकर, यही है पैगाम।

प्रकृति है हमारी माँ, इसका करो जतन,
इसमें ही छिपा है, जीवन का रतन।

समझ लो ये संदेश, यही है सार गहरा,
प्रकृति के बिना जीवन, है कितना अधूरा।

सपनों का पीछा

आँखों में सपने लिए दौड़ता हूँ,
हर कदम पर नई आशा।
अड़चनों की परवाह नहीं मन में,
लक्ष्य की ओर ले जाने वाला मेरा निशां।

कांटे होंगे राहों में कितने भी,
मैं चलता रहूँगा धैर्य से।
विश्वास की मशाल हाथों में लेकर,
अंधेरे को हरा दूँगा तेज से।

पंख नहीं हैं फिर भी उड़ान भरूँगा,
आत्मविश्वास के बल पर।
नकार मिलेगा भले ही दुनिया से,
मेरे सपने बड़े, सच्चे।

एक दिन ज़रूर मिलेगा किनारा,
जहाँ मेरे प्रयत्नों को फल मिलेगा।
सपनों का पीछा नहीं छोड़ूंगा,
मेरा मन मुझे हमेशा यही कहेगा।

लेख

ऑनलाइन शिक्षा: संभावनाएँ और चुनौतियाँ

आज के तकनीकी युग में, ऑनलाइन शिक्षा का महत्व तेजी से बढ़ रहा है। इंटरनेट और डिजिटल उपकरणों की उपलब्धता ने शिक्षा के क्षेत्र में क्रांति ला दी है, जिससे ज्ञान और सीखने के अवसर भौगोलिक सीमाओं से परे सभी के लिए सुलभ हो गए हैं। ऑनलाइन शिक्षा पारंपरिक शिक्षा प्रणाली के पूरक के रूप में और कई मामलों में एक प्रभावी विकल्प के रूप में उभरी है।

ऑनलाइन शिक्षा की सबसे बड़ी संभावनाओं में से एक है इसकी पहुंच। दूर-दराज के क्षेत्रों में रहने वाले छात्र, व्यस्त पेशेवर और विशेष आवश्यकताओं वाले व्यक्ति भी अपनी सुविधानुसार और अपनी गति से शिक्षा प्राप्त कर सकते हैं। विभिन्न प्रकार के ऑनलाइन पाठ्यक्रम, डिग्री प्रोग्राम और कौशल विकास कार्यक्रम उपलब्ध हैं, जो शिक्षार्थियों को अपनी रुचियों और करियर लक्ष्यों के अनुसार चयन करने की स्वतंत्रता प्रदान करते हैं।

ऑनलाइन शिक्षा सीखने को अधिक व्यक्तिगत और लचीला बना सकती है। छात्र अपनी समय सारणी के अनुसार अध्ययन कर सकते हैं और उन विषयों पर अधिक ध्यान केंद्रित कर सकते हैं जिनमें उन्हें अधिक रुचि है या कठिनाई हो रही है। इंटरैक्टिव मल्टीमीडिया सामग्री, जैसे वीडियो, सिमुलेशन और ऑनलाइन चर्चा मंच, सीखने को अधिक आकर्षक और प्रभावी बना सकते हैं।

हालांकि, ऑनलाइन शिक्षा अपनी चुनौतियों के साथ भी आती है। छात्रों को स्व-अनुशासन और प्रेरणा बनाए रखने की आवश्यकता होती है, क्योंकि सीखने की प्रक्रिया में अधिक स्वायत्तता शामिल होती है। तकनीकी समस्याओं, जैसे अस्थिर

इंटरनेट कनेक्शन या उपकरणों की कमी, कुछ छात्रों के लिए बाधाएं पैदा कर सकती हैं।

ऑनलाइन शिक्षा में सामाजिक संपर्क और सहकर्मी सीखने के अवसर पारंपरिक कक्षा सेटिंग्स की तुलना में कम हो सकते हैं। छात्रों को अपने प्रशिक्षकों और सहपाठियों के साथ प्रभावी ढंग से जुड़ने के लिए सक्रिय प्रयास करने की आवश्यकता होती है। ऑनलाइन शिक्षा की गुणवत्ता और मान्यता भी एक चिंता का विषय हो सकती है, इसलिए छात्रों को प्रतिष्ठित और मान्यता प्राप्त संस्थानों से पाठ्यक्रम चुनना महत्वपूर्ण है।

ऑनलाइन शिक्षा के भविष्य में कृत्रिम बुद्धिमत्ता (एआई) और आभासी वास्तविकता (वीआर) जैसी तकनीकों का एकीकरण सीखने के अनुभव को और अधिक समृद्ध और व्यक्तिगत बना सकता है। एआई-पावर्ड ट्यूटर्स छात्रों को व्यक्तिगत प्रतिक्रिया और सहायता प्रदान कर सकते हैं, जबकि वीआर इमर्सिव लर्निंग वातावरण बना सकता है।

निष्कर्ष रूप में, ऑनलाइन शिक्षा में शिक्षा को अधिक सुलभ, लचीला और व्यक्तिगत बनाने की अपार क्षमता है। हालांकि, इसकी चुनौतियों का समाधान करना और गुणवत्ता, मान्यता और समान पहुंच सुनिश्चित करना महत्वपूर्ण है ताकि यह सभी शिक्षार्थियों के लिए एक प्रभावी और मूल्यवान विकल्प बन सके।

भारत की अंतरिक्ष यात्रा: उपलब्धियाँ और भविष्य की योजनाएँ

भारत ने अंतरिक्ष अन्वेषण के क्षेत्र में पिछले कुछ दशकों में महत्वपूर्ण प्रगति की है और एक प्रमुख अंतरिक्ष शक्ति के रूप में उभरा है। इसरो (भारतीय अंतरिक्ष अनुसंधान संगठन) ने कई महत्वाकांक्षी मिशनों को सफलतापूर्वक अंजाम दिया है, जिससे देश ने वैश्विक अंतरिक्ष समुदाय में एक विशिष्ट स्थान हासिल किया है।

भारत की अंतरिक्ष यात्रा की प्रमुख उपलब्धियों में उपग्रह प्रक्षेपण क्षमता का विकास शामिल है। पीएसएलवी (ध्रुवीय उपग्रह प्रक्षेपण यान) और जीएसएलवी (भूस्थिर उपग्रह प्रक्षेपण यान) जैसे स्वदेशी रूप से विकसित प्रक्षेपण यानों ने कई भारतीय और विदेशी उपग्रहों को सफलतापूर्वक कक्षा में स्थापित किया है। चंद्रयान-1, चंद्रमा की परिक्रमा करने वाला भारत का पहला मिशन, और मंगलयान, जिसने भारत को मंगल ग्रह की कक्षा में पहुंचने वाला चौथा देश बना दिया, महत्वपूर्ण वैज्ञानिक और तकनीकी सफलताएं थीं।

हाल ही में, चंद्रयान-3 की चंद्रमा के दक्षिणी ध्रुव पर सफल लैंडिंग भारत के लिए एक ऐतिहासिक उपलब्धि थी, जिसने देश को चंद्रमा की सतह पर सफलतापूर्वक उतरने वाला चौथा देश बना दिया। इस मिशन ने चंद्रमा के दक्षिणी ध्रुव पर बर्फ और अन्य संसाधनों की खोज के लिए महत्वपूर्ण डेटा प्रदान किया है।

भारत की अंतरिक्ष यात्रा न केवल वैज्ञानिक अनुसंधान और तकनीकी विकास के लिए महत्वपूर्ण है, बल्कि यह संचार, मौसम पूर्वानुमान, आपदा प्रबंधन और राष्ट्रीय सुरक्षा जैसे क्षेत्रों में भी महत्वपूर्ण योगदान देती है। भारतीय उपग्रह विभिन्न प्रकार की सेवाएं

प्रदान करते हैं जो देश के सामाजिक और आर्थिक विकास के लिए आवश्यक हैं। भविष्य के लिए, भारत की अंतरिक्ष एजेंसी इसरो ने कई महत्वाकांक्षी योजनाएं बनाई हैं। गगनयान मिशन का लक्ष्य 2025 तक भारतीय अंतरिक्ष यात्रियों को पृथ्वी की निचली कक्षा में भेजना है, जो मानव अंतरिक्ष उड़ान के क्षेत्र में भारत की क्षमता को प्रदर्शित करेगा। आदित्य-एल1 मिशन सूर्य का अध्ययन करने वाला भारत का पहला मिशन है।

अंतरग्रहीय अन्वेषण भी इसरो की भविष्य की योजनाओं का एक महत्वपूर्ण हिस्सा है। शुक्रयान-1 मिशन शुक्र ग्रह का अध्ययन करने के लिए प्रस्तावित है। भारत अन्य देशों के साथ मिलकर अंतरिक्ष अन्वेषण परियोजनाओं में भी सक्रिय रूप से भाग ले रहा है।

निजी क्षेत्र की भागीदारी को बढ़ावा देना भारत की अंतरिक्ष नीति का एक महत्वपूर्ण पहलू बन गया है। सरकार अंतरिक्ष गतिविधियों में निजी कंपनियों की भागीदारी को प्रोत्साहित कर रही है, जिससे नवाचार और विकास को बढ़ावा मिलेगा और अंतरिक्ष क्षेत्र में रोजगार के नए अवसर पैदा होंगे।

निष्कर्ष रूप में, भारत की अंतरिक्ष यात्रा ने कई महत्वपूर्ण उपलब्धियां हासिल की हैं और भविष्य के लिए महत्वाकांक्षी योजनाएं हैं। वैज्ञानिक अनुसंधान, तकनीकी विकास और राष्ट्रीय विकास में अंतरिक्ष प्रौद्योगिकी की महत्वपूर्ण भूमिका को देखते हुए, भारत का अंतरिक्ष कार्यक्रम देश के भविष्य के लिए एक महत्वपूर्ण स्तंभ बना रहेगा।

English

Sections

Poems

The Old Oak

A sentinel of seasons, bark so deep,
He stands in fields where silent shadows creep.

His branches, arms that reach towards the sky,
Have watched the centuries slowly drift on by.

Through summer's heat and winter's icy breath,
He's offered shelter, conquering even death.

The robin nests within his leafy crown,
And fallen acorns dot the mossy ground.

He's seen the farmer sow, the reaper bind,
The village children leave their cares behind.

He's felt the storms that raged with mighty force,
And bowed his head but held his steady course.

Now age has etched its lines upon his face,
A weathered grandeur, holding time and space.

He stands a legend, whispered on the breeze,

A timeless story rustling through his trees.

City Lights

A million windows bloom in fading light,
Each holding stories hidden from the night.

A distant hum, a siren's lonely call,
The restless city answers one and all.

Through canyons deep where steel and glass ascend,
A hurried pace, a journey without end.

The neon signs in vibrant colors gleam,
Reflecting hopes within a waking dream.

A lone musician plays a soulful tune,
Beneath the silent gaze of the pale moon.

Lovers stroll hand-in-hand, their whispers low,
While shadows dance where secrets softly flow.

And as the dawn begins to paint the gray,
The city stirs and starts another day.

A vibrant pulse, a tapestry untold,
In every brick, a story to unfold.

The Silent Shore

Where sand meets sea in a soft, whispered sigh,
The endless waves in rhythmic motion lie.

The salty air, a kiss upon the face,
A tranquil beauty in this lonely place.

The seabirds circle with a piercing cry,
Beneath the vast expanse of azure sky.

The sun descends, a fiery, golden ball,
Casting long shadows that begin to fall.

A sense of peace, a quiet solitude,
Where worries fade and hearts feel understood.

And as the stars ignite with silver gleam,
The ocean murmurs like a peaceful dream.

A timeless rhythm, ancient and profound,
Where solace on the silent shore is found.

Articles

The Enduring Appeal of Reading

In an age dominated by screens and fleeting digital content, the act of reading a physical book retains a unique and enduring appeal. More than just a pastime, reading offers a profound connection with stories, ideas, and the very essence of human experience. The tactile sensation of turning a page, the scent of paper, and the focused concentration required to immerse oneself in a narrative create an engagement that digital media often struggles to replicate.

Beyond the sensory experience, reading fosters critical thinking and expands our understanding of the world. By encountering diverse perspectives and complex characters, we develop empathy and learn to navigate the nuances of human behavior. The process of following a plot, analyzing themes, and making inferences strengthens our cognitive abilities and enhances our capacity for abstract thought. Unlike the passive consumption of visual media, reading actively engages the mind, encouraging imagination and creativity.

Furthermore, books serve as invaluable repositories of knowledge and wisdom accumulated over centuries. From scientific discoveries to philosophical inquiries and historical accounts, literature offers a gateway to understanding the past, present, and potential futures. Whether delving into the intricacies of quantum physics or exploring the depths of human emotion through poetry, reading provides a pathway to lifelong learning and intellectual growth.

In a world that often feels fragmented and overwhelming, the act of reading can also be a source of profound comfort and escape. Immersing oneself in a captivating story can provide a temporary respite from daily stresses, allowing for introspection and emotional release. The companionship of well-developed characters and the exploration of unfamiliar worlds can be both enriching and deeply satisfying.

Ultimately, the enduring appeal of reading lies in its ability to connect us with ourselves, with others, and with the vast tapestry of human knowledge and imagination. In a rapidly changing world, the quiet act of turning a page remains a powerful and timeless way to learn, grow, and experience the richness of life.

Technical Section

Very-Large-Scale Integration (VLSI)

VLSI, or Very-Large-Scale Integration, represents the monumental achievement of integrating millions to billions of transistors onto a single silicon chip. This technology has been the pivotal force behind the ongoing digital revolution, enabling the creation of increasingly powerful yet smaller and more energy-efficient electronic devices. The journey to VLSI was a gradual progression from initial transistor integration to the complex microprocessors and memory units we rely on today.

The fabrication of VLSI chips is a highly sophisticated process, involving precise layering, etching, and doping of semiconductor materials. Circuit designers utilize specialized languages to define the chip's behavior, optimizing for speed, power, and size. This abstract design is then meticulously translated into a physical layout, dictating the placement of every component. Rigorous verification and testing are crucial to ensure the final chip operates flawlessly.

The impact of VLSI is ubiquitous, forming the core of microprocessors in our computers and smartphones, the memory that stores our data, and the integrated circuits that power everything from consumer electronics to advanced communication networks and the automotive industry. Even the sophisticated processing required for artificial intelligence and

machine learning relies on cutting-edge VLSI design and manufacturing.

Despite its immense success, VLSI faces ongoing challenges as transistor dimensions shrink further, including issues related to power dissipation, quantum effects at nanoscale levels, and the sheer complexity of design and manufacturing. However, continuous innovation in materials, chip architectures, and fabrication techniques promises to overcome these hurdles and drive the next wave of advancements in electronic technology. VLSI remains the indispensable engine powering our increasingly digital world.

Internet of Things (IoT)

The Internet of Things (IoT) describes a vast network of physical objects embedded with sensors, software, and connectivity, allowing them to exchange data with other devices and systems[1] via the internet. This interconnectedness bridges the physical and digital realms, transforming how we interact with our environment and enabling intelligent automation across a wide spectrum of applications. From smart homes and wearables to industrial machinery and smart cities, the IoT ecosystem is built upon devices that sense, connect, and often actuate based on the

data they collect and process.

The functionality of an IoT system relies on several key elements: the "things" themselves equipped with sensors and actuators, the connectivity that allows them to transmit and receive data through various network technologies, the data processing that transforms raw information into actionable insights, and the user interface that enables human interaction with the system. The intelligence embedded within IoT systems allows for decision-making, task automation, and the delivery of valuable insights derived from the analyzed data.

The applications of IoT are incredibly diverse, impacting sectors such as smart homes, wearable technology, healthcare, industrial automation, smart cities, agriculture, and transportation. By connecting and analyzing data from the physical world, IoT systems offer opportunities for increased efficiency, convenience, improved safety, and new levels of automation. However, the widespread adoption of IoT also presents significant challenges. Ensuring the security of connected devices and the vast amounts of data they generate, protecting user privacy, achieving interoperability between devices from different manufacturers, and managing the scalability and reliability of large-scale deployments are critical concerns that need to be addressed for the responsible and beneficial growth of the Internet of Things. The future of IoT promises even greater integration of AI and more sophisticated devices, further blurring the lines between the physical and digital worlds.

Student Innovations & Projects

Projects

Sr. No	Name of Student	Name of Guide	Project Titles Assigned
1.	KU. VAISHNAVI PRASHANTRAO ASOLE	Dr. M. N. Tibdewal	ECG future Analysis for automatic detection of cardiac diseases
	KU. MANALI ARUN PATIL		
	ABHISHEK ANAND DHOTE		
	KU. MRUNAL KISHOR PATIL	Dr. R. S. Dhekekar	Cleaning Robot
	KU. ROHINI AJAY DAWALE		
2.	KU. VAISHNAVI PRADEEP GAWANDE		
	SIDDHESH SATISH NAWALE		
	KU. MRUNAL KISHOR PATIL		
3.	KU. SAMRUDDHI AVINASH THOTE	Dr. K.B. Khanchandani	Design of control unit for fertilizer decomposition
	KU. VAISHNAVI MILIND CHOBE		
	GAURAV GAJANAN GHOGLE		
	KUNAL BIRMARAM CHAUDHARI		
	KAUSTUBH AJAY RAJVAIDYA		
4.	KU. SHRAVANI SUNIL GADHAVE	Ms. K. S. Vyas	E-voting system using Blockchain Technology
	KU. SHRUTI VILAS DUDHE		
	PRATIK DNYANESHWAR KOLASKAR		
5.	KU. ABHIPSA ARVIND PADOLE	Dr. D. P. Tulaskar	Hand talk assisting system for deaf and dump people
	KU. DNYANESHWARI RAVVINDRA BHISE		
	KU. VAISHNAVI MAJBUTSING SOLANKE		
	DHANANJAY PRASHANT AWATADE		
	UDAY RAVINDRA DESHMUKH		
6.	KU. NIKITA SURESH	Mr. V. K.	

	MANSUTE	Bhangdiya	Hydroponics Farming Automation
	KU. ADITI MANOJ DESHMUKH		
	KU. SAYALI VIJAY KATOLE		
	YASH SHRIHARI KHOND		
	RAM VIJAY INGLE		
7	SAUMITRA SHARDUL DIGAMBAR	Mr. S. P. Badar	Design And Implementation of An Integrated Automation System for Organic Fertilizer
	TUSHAR DILIP HADGE		
	ANANTKUMAR RAJABHAU PATIL		
	GAURAV PRAKASH DUDHKOHALE		
8.	YASH SANJAYRAO WANKHADE	Mrs. Neerja S. Dharmale	Elevating Canteen Management with a Modern Web Solution
	MOHIT RATHI		
	KU. VISHAKHA GAJANAN WANKHADE		
	KU. MRUNALI AVINASH DAROKAR		
	YASH SANJAYRAO WANKHADE		
9.	KU. KHUSHI ARVIND VIDHALE	Mr. A. N. Dolas	Design of decomposition unit for fertilizer independence
	KU. SWARALI KISHOR NATHE		
	KU. KRISHNA PRAVIN SHENDE		
	KU. GAURI MANOJ MISHRA		
10.	SHREYASH UTTAMRAO GOLAM	Mr. K. T. Kahar	Industrial Robotic arm system
	PRASAD ANIL TELKAR		
	PRATHAM CHANDRAKANT DHOBE		
11.	KU. GAYATRI SANDEEP KANKAL	Mrs. Neerja S. Dharmale	Brain tumor detection using Image processing
	KU. PRANJALI VISHNUDAS GOND		
	KHUSHAL VIJAY BAGGAN		
	SYED ADNAN SYEDAHSAN		
	KU. GAYATRI SANDEEP KANKAL		
12.	PRATHAMESH DINESH	Mr. S. G.	Design and development of

	GATTANI	Nemane	seed germination system using IOT
	KU. DIPALI VINOD AGRAWAL		
	KU. SHRUSHTI PRASHANT NAWALKAR		
	HARSH LALIT DRONA		
13.	KU. ANAMIKA GAJANAN REWALE	Mr. Rupesh S. Mahamune	Classification of EMG Signals Using Convolutional Neural Networks
	KU. KIRTI ARUN RAUT		
	ABHISHEK HIMMATRAO ATOLE		
	ABHISHEK KAILAS RAUT		

Student Activities

Participation in inter-institute events by students of the program:

Our students actively participate in various technical competitions at inter-college, national, and international levels, including paper presentations, workshops, and project competitions. The college supports these efforts financially and through co-curricular activities in collaboration with industries. This helps students develop valuable skills and showcases the institute's expertise. The college website is regularly updated with information about these events and student achievements.

(A) Events within the state

Participation in Inter-Institute Events within State by Students

Sr.No	Name of Student	Date	Event	Conducted by	Event Outcome
1	Mr. Rajat patil Ms. Janavi G. Patil	3 April 2024	IEEE Techovation 2024	Godavari College of Engineering Jalgaon	Gained experience in project presentation, teamwork.
3	Miss. Aarya Chandrawanshi, Miss. Sarla Paraskar	26-27 Dec.2023	SGBAU Avishkar 2023	SGBAU Amravati. (26-27 Dec.2023)	Developed research and analytical skills while presenting their project to experts.
4	Kartik Shingade Shivam Sawale Tejas Kale	29th Oct 23	InitHacks-2023	Shri Vile Parle Kelavani Mandal's Institute of Technology, Dhule	Improved coding, problem-solving, and real-time project development skills.
5	Miss Roshni Borle	15 March 2024	StateLevel Inter-University Youth Festival	Dr.Babasaheb Ambedkar Marathwada University	Enhanced creativity, stage confidence, and teamwork in performing arts.
6	Miss Samiksha Daberao	29-31 December 2023	SGBAU Sports	SGBAU, Amravati	Learned discipline, endurance,

					and strategic thinking in sports.
7	Miss Madhavi Mahabuddhe	30 July 2023	Sports Championship 2023	Brihan maharshtra yoga parishad	Demonstrated yoga skills at a competitive level
8	Rupesh Shende Piyush Rathod Gaurav Dudhkohale Vedant Wadode Aniruddh Tayade Ayush Hirwe Anuraj Fulmali Harshal Pal Ritesh Jumde Rohan Mapari	8-10th Feb2024	Football	SGBAU Amravati	Learned discipline, endurance, and strategic thinking in sports.
9	Mrunal Pimpalkar Om Amale Anantkumar Patil Gaurav Adhao Sumit Dhage Harsh Drona Om Deshmukh	29-31st Jan 2024	Cricket	SGBAU Amravati	Learned discipline, endurance, and strategic thinking in sports.
10	Sakshi Bhojane Shubhrata Mishra Vedika Raut	29th Sept 2023	Chess	SGBAU Amravati	Learned discipline, endurance, and strategic thinking in sports.
11	Rudresh Latare Mansi Agrawal Shubhrata Mishra	8-10th Feb2024	Badminton	SGBAU Amravati	Learned discipline, endurance, and strategic thinking in sports.
12	Advait Awaghade Ayush Pimpalkar Shweteshwari Solanke Radhika Thakare Siddhi Borkar Rajsi Shah	8-10th Feb2024	Basketball	SGBAU Amravati	Learned discipline, endurance, and strategic thinking in sports.

	Roshni Borle Tanvi Jeurkar				
13	Hariom Pundkar Kartik Rane Rakesh Lande Dhanshri Vade Gouri Bhojpant Neha Bhutt Pratiksha Nachane Tanvi jeurkar Ayush Thute Kartik Gorle Rohan Khandar	8-10th Feb2024	Volleyball	SGBAU Amravati	Learned discipline, endurance, and strategic thinking in sports.
14	Subodh Onkar	8-10th Feb2024	Handball	SGBAU Amravati	Learned discipline, endurance, and strategic thinking in sports.
15	Akshay Pahurkar Ayush Ardak Sanket Nage Sachin Satpute Akshay Tapre Ganesh vairale Yash Dubey Kartik Yeul Vedant Mahalle Vansh Jaiswal Shailesh Sangrame	8-10th Feb2024	Kabaddi	SGBAU Amravati	Learned discipline, endurance, and strategic thinking in sports.
16	Shrideep Dhore	6-7 April 2024	CODEMENT_24 Hackathon	Nutan college of Engineering, Pune.	Improve problem-solving, and real-time project development skills.
17	Prajwal Pramod Dohare	6-7 April 2024	CODEMENT_24 Hackathon	Nutan college of Engineering, Pune.	Improve problem-solving, and real-time project development skills.

(B)Prizes/awards received in various events

Prizes/awards received by Students

Sr.No	Name of Student	Date	Event	Conducted by	Event Outcome
1	Mr. Rajat patil & Ms. Janavi G. Patil	3 April 2024	IEEE Techovation 2024	oragnized by Godavari College of Engineering Jalgaon	First Prize and certificate under the category of Software in Technovation
2	Mr. Tejas Kale along with other dept. students	23-27 March 2024	Techkriti 2024	IIT Kanpur	Second Prize at Techkriti 2024, IIT Kanpur.
3	Miss. Aarya Chandrawanshi Miss. Sarla Paraskar	26-27 Dec.2023	SGBAU Avishkar 2023	SGBAU Amravati.(26-27 Dec.2023)	received Second Prize
4	Kartik Shingade Shivam Sawale Tejas Kale	29th Oct 23	InitHacks-2023	Shri Vile Parle Kelavani Mandal's Institute of Technology, Dhule	Team VisionTech Innovator won the Trophy and Track Prize of Rs. 5000/- in Hackathon “InitHacks-2023”
5	Miss Roshni Borle	15 March 2024	State Level Inter-University Youth Festival	Dr. Babasaheb Ambedkar Marathwada University	Second Prize in Mime Competition
6	Miss Samiksha Daberao	29 to 31 December 2023	SGBAU Sports	SGBAU, Amravati	Colour Coat in Boxing(W)
7	Miss Madhavi Mahabuddhe	30 July 2023	Sports Championship 2023	Brihan maharshtra yoga parishad	Third Prize in Yoga Competition

Event 1
Title: Secret of Canva
Date: Sunday 8th October, 2023
Time: 9am to 12pm
Venue: DSP Lab
Total Students: 28 Students
Resource Person: Prasad Deshmukh, Niharika Dagaonkar, Shreya Dharmale

Event 2
Title: Arduino Mastery
Date: 13th & 14th March,2024
Time: 4pm to 8pm
Venue: Old Auditorium
Total Students: 95 Students
Resource Person: Prof. Mangesh Bharati and Team

Event 3
Title: Electrofiesta
Date: 15th & 16th March, 2024
Time: 4pm to 6pm,1pm to 3pm.
Venue: EXTC Department, Class C2.
Total Students: 20 Students
Resource Person: Mansi Agrawal, Prasad Deshmukh , Niharika Dagaonkar.

Event 4
Title: First Year Orientation
Date: 25 August 2023
Time: 11 am to 5 pm
Venue: EXTC Seminar Hall
Total Students: 80 Students
Resource Person: Dr. M. N. Tibdewal, Mrs. K. S. Vyas, Mr. S. P. Badar, Mr. S. G. Nemane

Event 5
Title: Aerobics Training
Date: 23 January 2024
Time: 4-8 pm
Venue: Chinchili
Total Students: 54 Students
Resource Person: Bhumika Deshmukh

SPORTS

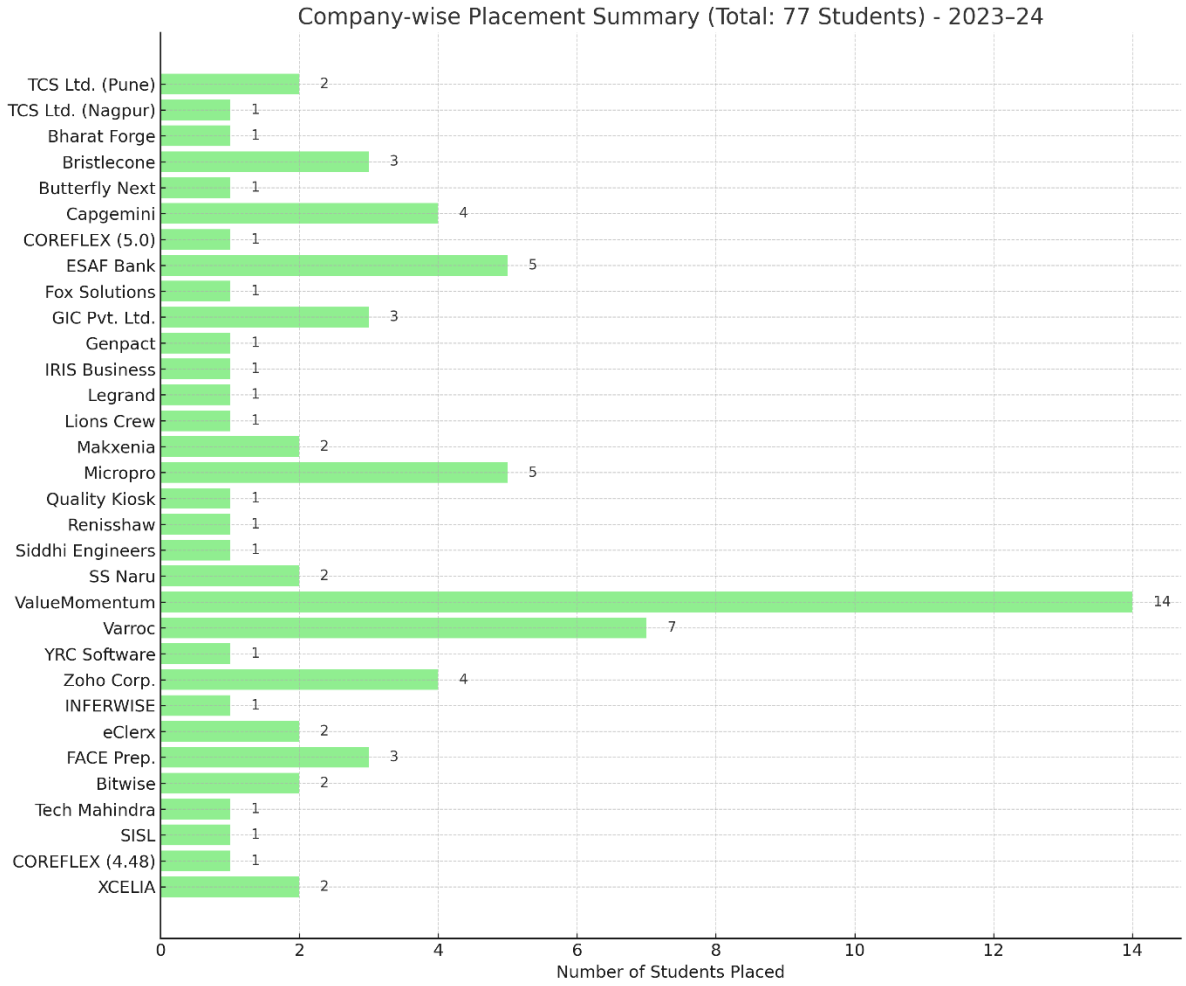
ABOUT US

The Sports Council oversees all sports activities at the college, with staff members assigned as in-charges for different sports. On National Festivals and Swami Vivekananda's Jayanti (12th January), staff participate in sports events. Daily training sessions are held to keep staff fit, and they are encouraged to engage in regular games and use the sports facilities as needed.

Year	Name of the Games	Name of the Award/ Medal	University/State/National/ International	Name of the student
2023-24	Chess (W)	Runners up (Women)	SGBAU Inter Collegiate Tournament	Samruddhi Deshmukh
				Shubhrata Mishra
				Vedika Raut
				Sakshi Bhojane

PLACEMENT

Sr. No.	Name of Company	No. of Students Placed	Salary per annum (In LPA)
01	TCS Ltd., Pune	**02**	**1.92**
02	TCS Ltd., Nagpur	**01**	**3.36**
03	Bharat Forge Ltd., Pune	**01**	**3.00**
04	Bristlecone India Limited, Mumbai	**03**	**4.25**
05	Buterfly Next	**01**	**4.5**
06	Capgemini Technology Servies India Ltd, Navi Mumbai	**04**	**4.0**
07	COREFLEX, Pune	**01**	**5.0**
08	ESAF Small Finance Bank	**05**	**3.75**
09	Fox Solutions Pvt. Ltd., Nashik	**01**	**5.46**
10	General Industrial Controls Pvt. Ltd., Pune	**03**	**4.00**
11	Genpact India Pvt. Ltd., Pune	**01**	**2.85**
12	IRIS Business Services Ltd., Mumbai	**01**	**4.5**
13	Legrand India Pvt. Ltd., Jalgaon	**01**	**2.16**
14	Lions Crew, Pune	**01**	**2.16**
15	Makxenia Engineering Resources Pvt. Ltd.,Ngpur	**02**	**1.62**
16	Micropro Software Solutions Limited, Nagpur	**05**	**3.0**
17	Quality Kiosk	**01**	**2.5**
18	Renisshaw Meterology Systems, Pune	**01**	**7.27**
19	Siddhi Consulting Engineers Pvt. Ltd., Pune	**01**	**3.25**
20	SS Naru P&M Pvt. Ltd., Thane	**02**	**1.92**
21	ValueMomentum Software Services Pvt. Ltd., Hydrabad	**14**	**4.0**
22	Varroc Polymer, Pune	**07**	**1.8**
23	YRC Software India LLP, Pune	**01**	**6.5**
24	Zoho Corporation Pvt. Ltd., Nagpur	**04**	**7.0**
25	INFERWISE, Pune	**01**	**4.12**
26	eClerx	**02**	**2.19**
27	FACE Prep., Coimbatore	**03**	**4.11**
28	Bitwise Solution Pvt. Lim., Pune	**02**	**2.40**
29	Tech mahindra Ltd., Hyderabad	**01**	**3.25**
30	SISL Infotech Pvt. Ltd.	**01**	**-**
31	COREFLEX, Pune	**01**	**4.48**
32	XCELIA Software, Pune	**02**	**-**
Total Students Placed		**77**	


Company-wise Placement Summary (Total: 77 Students) - 2023–24
TCS Ltd. (Pune) 2
TCS Ltd. (Nagpur) 1
Bharat Forge 1
Bristlecone 3
Butterfly Next 1
Capgemini 4
COREFLEX (5.0) 1
ESAF Bank 5
Fox Solutions 1
GIC Pvt. Ltd. 3
Genpact 1
IRIS Business 1
Legrand 1
Lions Crew 1
Makxenia 2
Micropro 5
Quality Kiosk 1
Renisshaw 1
Siddhi Engineers 1
SS Naru 2
ValueMomentum 14
Varroc 7
YRC Software 1
Zoho Corp. 4
INFERWISE 1
eClerx 2
FACE Prep. 3
Bitwise 2
Tech Mahindra 1
SISL 1
COREFLEX (4.48) 1
XCELIA 2
0
2
4
6
8
10
12
14
Number of Students Placed

Faculty

Achievements

Technical Papers Published

Sr. No.	Name of Authors	Paper Title	Publication Details with ISSN / ISBN / Vol. / Issue / DOI / Year	Indexing (SCI/Web of Science/Scopus/ UGC CARE/Google Scholar/Other)	Paper Link
1	Mr.Vijay Tripathi, Dr. M.N.Tibdewal	A survey on Motion Artifact Correction in Magnetic Resonance Imaging for Improved Diagnostics	Feb.2024 https://doi.org/10.1007/s42979-023-02596-1	SCI , Scopus, ACM Digital Liibrary, Google Scholar Indexed,	https://link.springer.com/article/10.1007/s42979-023-02596-1#citeas
2	Mr. S. P. Badar and Dr. K. Khanchandani,	Analyzing Polar Decoding Approaches: A Comparative Study	Journal of VLSI Design and Signal Processing, 9(3), 2023 (e-ISSN: 2581-8449)	Google Scholar	https://drive.google.com/file/d/14ljjM1_bCB_a6p7_fsh2v7XGx7tGX7lL/view?usp=drive_link
3	Dr. Neerja Dharmale, Dr. Aadhityan A , Dr. Ashutosh Srivastava and Prof. Saurabh Chaudhury	Performance Analysis of Un-doped and Doped Titania (TiO2) as an Electron Transport Layer (ETL) for Perovskite Solar Cells	Vol.30,no.5, DOI:https://doi.org/10.1007/s00894-024-05943-y, Year:2024	SCI , Scopus	https://link.springer.com/article/10.1007/s00894-024-05943-y https://rdcu.be/dGsUW

4	Dr. Neerja Dharmale, Dr. Rupesh Mahamune, Mr. Krishnaiah , Mr. Jayant Kumar Kar	Evaluating the Effect of Metal, Nonmetal, and Co-doping on Brookite TiO2	Year 2024,https://doi.org/10.1142/S1793292024500425	SCI , Scopus	https://worldscientific.com/doi/10.1142/S1793292024500425 https://doi.org/10.1142/S1793292024500425
5	Dr.Neerja Dharmale, Mr. Khushal Baggan, Ms. Gayatri Kankal, Mr. Syed Adnan, Ms. Vrushali D Dharmale	Optimizing Brain Tumor Detection using Machine Learning	Year 2024,Vol.2, ISSUE 1,	Google Scholar - Referred Journal;	https://ssgmjournal.in/index.php/ssgm/article/view/100
6	Mr. Vishwanath S. Mahalle, Mr. Narendra M. Kandoi, Dr. Santosh B. Patil	A powerful method for interactive content-based image retrieval by variable compressed convolutional info neural networks	https://doi.org/10.1007/s00371-023-03104-5,01 Oct 2023	SCI Journal	https://www.researchgate.net/publication/374369027_A_powerful_method_for_interactive_content-based_image_retrieval_by_variable_compressed_convolutional_info_neural_networks
7	Mr. Vikram Ingole, Ms. Yukta Morey,	Bridging Agricultural Communities: A Digital	Volume 12 Issue 4 April 2024,ISSN:2320:2882	UGC CARE	http://ijcrt.org/viewfull.php?&p_id=IJCRT24A4228

	Mr. Saurabh Chavhan, Mr. Ram Ingle	Platform for Machinery Access and Collaboration			
8	Mr. Lokesh Hiwarkar , Mr. Vikram Ingole, Mr. Om Paraswar , Mr. Deep Goje, Mr. Atharva Kute	Design And Development Of Seed / Granule Spreader Mechanism For Unmanned Aerial Vehicle (Uav)	Volume 12 Issue 4 April 2024,ISSN:2320:2882	UGC CARE	https://ijcrt.org/viewfull.php?&p_id=IJCRT24A4427
9	Ms.Ashwini .A. Deshmukh and others	Research on Soyabean Seed Grading	AJANTA -ISSN 2277 - 5730(www.sjifactor.com)		
10	Prof.S.G. Nemane, Dr.D.P.Tulaskar and others	Design and Development of Seed Germination using IOT	Volume 15 Issue 2 ISSN Print: 0976-6480 and ISSN Online: 0976-6499	Google Scholar, SCOPE Database Indexed	https://iaeme.com/Home/article_id/IJARET_15_02_003
11	Dr. Kamlesh Kahar and others	Industrial Robotic Arm System	Year 2024,Vol.2, ISSUE 1,	Google Scholar,	https://ssgmjournal.in/index.php/ssgm/article/view/101
12	Dr. Kamlesh Kahar and others	Assistive Navigational Stick	Year 2024,Vol.2, ISSUE 1,	Google Scholar,	https://ssgmjournal.in/index.php/ssgm/article/view/102
13	Mr. Pranav Lod , Mr. V. S. Mahalle , Mr. N.	Efficient Content Based Image Retrieval System	Volume 18, Issue 5, PP- 1205-1224, ISSN No:1001-2400, (https://doi.org/10.5281/Zenodo.11299),	Scopus	https://zenodo.org/records/11299605

	M. Kandoi ,Dr. S. B. Patil	Based on Early and Late Fusion Technique	May 25,2024		
14	Dr. Kamlesh Kahar, Dr. Ram Dhekekar	Optimization of MEMS-based Energy Scavengers and output prediction with machine learning and synthetic data approach	Volume 358, 16 August 2023, 114429, DOI-https://doi.org/10.1016/j.sna.2023.114429	SCI	https://www.sciencedirect.com/science/article/pii/S0924424723002789
15	Mr. Rupesh Mundhada, Dr D.D. Nawgaje	Statistical Analysis of Retinal Image Processing Techniques from an Empirical Perspective	The Indian Journal of Technical Education, September 2023, Volume 46, page no. 196-204	UGC Care	NA
16	Mr. Rupesh Mundhada, Dr D.D. Nawgaje	U-Net-based gannet sine cosine algorithm enabled lesion segmentation and deep CNN for diabetic retinopathy classification	Computer Methods in Biomechanics and Biomedical Engineering: Imaging & Visualization	Scopus	https://www.tandfonline.com/doi/abs/10.1080/21681163.2023.2236233

Number of quality publications in conference by faculty (2022-2023)

Sr. No.	Name of Authors	Paper Title	Publication Details with ISSN / ISBN / Vol. / Issue / DOI / Year	Indexing (SCI/Web of Science/Scopus/UGC CARE/Google Scholar/Other)	Paper Link
1	Mr. Vishwanath S. Mahalle, Mr. Narendra M. Kandoi, and Dr. Santosh B. Patil	Transfer Learning by Fine-Tuning Pre-trained Convolutional Neural Network Architectures for Image Recognition	ISSN 2731-555X ISSN 2731-5568 (electronic) Data-Intensive Research ISBN 978-981-99-9178-5 ISBN 978-981-99-9179-2 (eBook) https://doi.org/10.1007/978-981-99-9179-2.	Proceedings of IDBA 2023 (Springer).	https://www.researchgate.net/publication/379031488_Transfer_Learning_by_Fine-Tuning_Pre-trained_Convolutional_Neural_Network_Architectures_for_Image_Recognition
2	Mr. Vishwanath S. Mahalle, Mr. Narendra M. Kandoi, Dr. Santosh B. Patil,Mr. Abhij Banubakode and Ms. Vandana C. Bagal	Enhancing Efficiency in Content Based Image Retrieval System Using Pre-trained Convolutional Neural Network Models	. ISBN- 978-981-5179-61-3 (Print), eISBN-978-981-5179-60-6 (Online). DOI: 10.2174/9789815179606124010015	Bentham Book-May-2024	https://www.eurekaselect.com/ebook_volume/3704

Number of patent/Copyright by faculty (2023-2024)

Sr. No.	Name of Inventors	Application No. / Publication No.	Title of the Invention	Status Published / Granted	link for proof
1	Dr. Santosh. B. Patil and Others	Application No.: 202421032258	A Seeding Device For An Unmanned Aerial Vehicle	Date of filing of Application : 24/04/2024	
2	Dr.Rupesh Mahamune, Dr. Neerja Dharmale	418067-001	EMOTIONAL INSIGHT MONITORING WEARABLE DEVICE	45503	https://drive.google.com/file/d/1zWu5bF65VrBVkiEDFCbTmqkGJp4MauEs/view?usp=sharing

Graphics

&

Illustrations

• **Cover Page Design:**
The magazine cover reflects the spirit of *"Innovation, Technology, and Vision"*, symbolizing the department's progressive journey through modern design elements and thematic visuals.

• **Section Dividers:**
Professionally designed headers and graphics maintain a consistent and visually pleasing structure across all sections—*Achievements*, *Research*, *Placements*, *Creative Writing*, and more.

• **Event Photographs:**
Visual moments captured from key departmental activities including:
– Electro-Metro workshop
– Guest lectures and webinars on placement & technical upskilling
– Project exhibitions and Avishkar 2023 participations
– FDPs, MoU signings, and industry visits.

• **Infographics:**
– Bar chart showing Company-wise Placement Summary – 2022–23
– Visual representations of student project categories, training programs, and research output.

• **Student Artwork Contributions:**
Selected entries from students, including:
– Hand-drawn illustrations, posters, and technical sketches
– Digital designs contributed for theme pages and creative writing backdrops.

• **QR Code Access:**
A custom-designed QR code linking to the online version of SRUJJAN, provided on the back cover to ensure easy accessibility for readers.

Acknowledgment

We take this opportunity to express our sincere gratitude to all those who supported and contributed to the successful completion of SRUJJAN 2023–2024, the annual magazine of the Electronics & Telecommunication Engineering Department.

We are deeply grateful to:
•**Dr. M. N.Tibdewal**, Head of Department, for his continuous encouragement, valuable guidance, and motivation throughout the magazine's journey.

• **Prof. Sanjay Satal**, Faculty Coordinator, whose mentorship, vision, and unwavering support served as the backbone of the editorial team.

• All **faculty members** for their contributions in content review, event documentation, and their active involvement in departmental activities featured in this edition.

• The **SRUJJAN Editorial Team**, whose dedication, teamwork, and creative energy turned ideas into reality through meticulous editing, designing, and coordination.

• The **students and contributors**, who enriched the magazine with their articles, poems, artworks, and project insights, making SRUJJAN not just informative but also inspiring.

• The **technical and non-teaching staff**, whose behind-the-scenes efforts helped us in completing this magazine smoothly and on time.

We wholeheartedly thank everyone who helped transform this edition of SRUJJAN into a vibrant record of our department's achievements, creativity, and spirit.

– SRUJJAN Editorial Team
Department of Electronics & Telecommunication Engineering
SSGMCE, Shegaon

SCAN ME

"Your hard work and dedication will pave the way for your success."