VEER SURENDRA SAI UNIVERSITY OF TECHNOLOGY, BURLA

TECHNICAL NEWSLETTER

JAN 2024 - JULY 2024

Issued by ***Technical Society***

A STATE GOVT. UNITARY UNIVERSITY COVERED UNDER SECTION 2(F) & 12(B) OF UGC ACT P.O.: ENGINEERING COLLEGE, BURLA (SIDDHI VIHAR), DIST: SAMBALPUR ODISHA - 768018, INDIA

TECHNICAL NEWSLETTER

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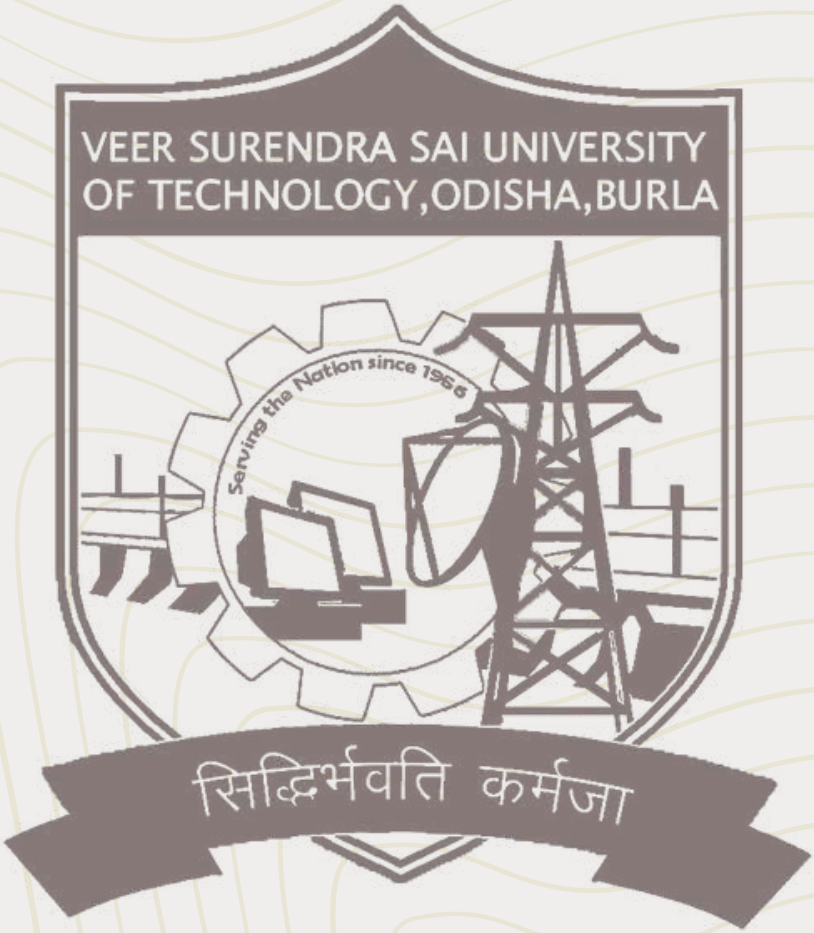

VEER SURENDRA SAI UNIVERSITY OF TECHNOLOGY, BURLA
Issued By Technical Society

VICE CHANCELLOR

Reflecting on the previous academic year, we have observed a wide array of scholarly endeavors and stimulating club activities that have inspired the passions and capabilities of our students. This newsletter acts as a vibrant exhibition, emphasizing their intellect, creativity, and steadfast enthusiasm. We extend our congratulations to the students who launched this platform, demonstrating their innovative thinking and collaborative spirit.

We would like to express our gratitude to the entire community of Veer Surendra Sai University of Technology, Burla. Our collective mix of diverse viewpoints, determination, and commitment to excellence characterizes our identity. With this powerful collaboration, we are poised to explore new opportunities and achieve even greater accomplishments.

PROF. BANSHIDHAR MAJHI

DEAN OF STUDENTS' WELFARE

Within our institution, vibrant student communities are sustained by a steadfast commitment to innovation. These groups, motivated by enthusiasm and inquisitiveness, create an environment conducive to experimentation, learning, and collaboration. Their shared aspirations encourage us to welcome change with fortitude and to venture into new realms. We observe the impressive projects and initiatives arising from these communities

By working together, we can foster a culture of innovation that advances our institution and makes a positive contribution to our ever-changing world. By supporting and recognizing the exceptional contributions of our students, we can collectively shape a future characterized by innovation and advancement.

PROF. SANJAY KUMAR PATRO

ASSOCIATE DEAN STUDENTS' WELFARE

DR. PUNYAPRIYA MISHRA

In our institution, lively student communities flourish through an unwavering commitment to innovation. Driven by enthusiasm and inquisitiveness, these groups act as vibrant centers for experimentation, education, and collaboration. Their limitless aspirations motivate us to welcome change with fortitude and to pursue new opportunities. Observing exceptional projects and initiatives arise is the most rewarding endeavor.

Let us work together to foster a culture of innovation that advances our institution and creates a significant impact on our ever-changing world. By recognizing the extraordinary contributions of our students, we can collectively influence a future defined by innovation and advancement.

CO-ORDINATOR STUDENTS' WELFARE

MR. ANANDA KUMAR BEHERA

Enter the core of our institution, a place where innovation flourishes and creativity is limitless. Within these lively corridors and energetic student communities, a harmonious blend of passion and curiosity resonates throughout the space. These vibrant centers, driven by an unwavering commitment to transcending limits, stand as symbols of inspiration and teamwork.

As we observe the extraordinary projects and initiatives in development, we are enthralled by the remarkable creativity and tireless quest for excellence. It is a captivating scene, where resilience intertwines with creativity, and where every effort brings us nearer to new possibilities.

FORMER TECHNICAL VICE PRESIDENT

DR. BIDYADHAR ROUT

As we reflect on the academic journey we have undertaken, a rich tapestry of scholarly pursuits and dynamic club activities emerges before us. This communication serves as a vibrant representation, encapsulating the brilliance, creativity, and unwavering enthusiasm of our student body.

We extend our appreciation to the visionary individuals who established this platform, which stands as a testament to their creativity and spirit of collaboration. Our gratitude resonates throughout the esteemed halls of Veer Surendra Sai University of Technology, Burla, encompassing every member of our community.

CURRENT TECHNICAL VICE PRESIDENT

PROF. SUDHANSU RANJAN DAS

Our institution is a vibrant hub of innovation, where passionate and curious student communities are constantly pushing boundaries through experimentation and collaboration. Their bold initiatives and projects inspire us all to embrace change and explore uncharted territories.

By engaging with these trailblazers, we can cultivate a culture of forward-thinking progress that not only elevates our institution but also impacts the world beyond. Together, let's celebrate and champion the extraordinary efforts of our students as they shape the future with creativity, resilience, and vision.

FROM THE EDITOR'S DESK

SHREYA SWAIN
(EDITOR-IN-CHIEF)

As the Editor-in-Chief, I am consistently motivated by your steadfast support, enthusiasm, and commitment as we navigate various technical fields. Together, we have created more than a mere publication; we have fostered a dynamic and inclusive community united by a common passion for knowledge, creativity, and the influence of language. Looking ahead, I am eager about the opportunities that await us and the narratives we have yet to share.

The progression from a content writer to the position of editor-in-chief for the technical newsletter has been a remarkable experience, significantly enhancing my writing abilities. I am excited to have had the chance to contribute to this outstanding journal for the Technical Society and hope that it becomes an exemplary platform for the technology enthusiasts at VSSUT, Burla.

ROHIT MOHANTY
(EDITOR-IN-CHIEF)

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SAMAVESH

Annual Technical Fest 2024

Samavesh and Vassaunt 2024, the prestigious techno-cultural fest of VSSUT, concluded on a high note in March, leaving a lasting impression on participants and attendees alike. The four-day extravaganza was a celebration of technological brilliance and artistic creativity.

Samavesh, the technical segment of the fest, took central stage, drawing the brightest minds from across the university. It showcased a remarkable range of technical competitions, workshops, and exhibitions, providing a platform for students, professionals, and tech enthusiasts to push the boundaries of innovation.

From robotics challenges and coding marathons to drone demonstrations and engineering model exhibitions, Samvesh 2024 was a true reflection of cutting-edge technological advancement and creativity. Participants not only competed but also collaborated, sharing knowledge and ideas that sparked new solutions to real-world problems.

Samavesh 2024 featured an array of thrilling technical events, including Airflix, Splash down challenge, Metabonds, Innovator's Expo, Topsy Run, Hoverdroids, Timber Tower, Bot balls, Maze Hunt, Robo Sumo, Death Valley, Arcade Flyers and the list goes on.

This events were conducted by various technical clubs and some of the core branches which energized the whole event with a flair of exuberence. The success of Samavesh and Vassaunt 2024 would not have been possible without the tireless efforts of the organizing committee, comprising dedicated students, faculty members, and staff.

Their meticulous planning and hard work ensured the seamless execution of the event. As the curtains close on this year's edition, Samvesh 2024 stands out as a major highlight, inspiring future innovators. We eagerly look forward to the next edition, promising even greater technological breakthroughs, creativity, and excitement.

EVENTS 2024

Annual Technical Fest 2024

FLYING MACHINE 2.0

AEROTECH

Flying Machine 2.0, an exciting aeromodelling contest held during SAMAVESH 2024 at VSSUT , Burla brought together students to showcase their technical ingenuity. Participants gained invaluable hands-on experience in designing, fabricating, and successfully flying their own aircraft models. The event fostered creativity and practical learning, pushing students to apply engineering principles in a dynamic and competitive environment.

ARCADE FLYERS

AEROTECH

At SAMAVESH 2k24, VSSUT Burla, we hosted an exciting event called Arcade Flyers, where students had the chance to experience flying a plane on a simulator. Participants competed for the best timing and aerobatic ability, with the winner determined based on their impressive performance, showcasing both skill and enthusiasm for aviation.

EVENTS 2024

Annual Technical Fest 2024

CARNIVAL QUEST

AEROTECH

Carnival Quest was an exciting treasure hunt event held at SAMAVESH 2024 VSSUT . The game will be played at 8 different venues. All the participants will be given some riddles which they will have to decode and reach their venue. There they will have to perform a given task and the team which will complete the task first will be declared as the winner. In the first round, no team will get eliminated. Thereafter, there will be 3 eliminating rounds. The final will be played between 2 teams and one team will be declared as the winner.

TRIVIA TOURNAMENT

ASME

The Trivia Tournament was a test of wit and wisdom, attracting participants from every year of college. This event featured a series of challenging questions from a wide range of topics, including the technical world, entertainment, and science. The competition consisted of three distinct rounds, each testing different aspects of general knowledge and quick thinking. The team with the highest cumulative score emerged victorious, claiming the title of Trivia Champions.

EVENTS 2024

Annual Technical Fest 2024

HOVERDROIDS

ASME

One of the most thrilling competitions of SAMAVESH 2024, Hoverdroids tasked participants with navigating RC hovercrafts through a challenging maze. This two-round competition required competitors to guide their hovercraft from the starting point to the finish line across a variety of obstacles, including sharp turns, steep ramps, uneven terrain, and slippery surfaces. A total of 45 participants demonstrated their technical prowess, with the fastest team earning top honors.

BOTBALLS

ASME

Botballs was also one the most anticipated and well-loved competition of SAMAVESH 2024, drawing in a remarkable 70 participants. In this event, students controlled robots using an Android app via Wi-Fi modules, maneuvering their bots to collect balls scattered around the arena. Each ball carried a different point value based on its color, adding an extra layer of strategy as participants aimed to gather the highest-scoring balls within a limited time. The excitement and engagement from both participants and the audience made botballs a true highlight of the fest.

EVENTS 2024

Annual Technical Fest 2024

TRADING PRO

E-CELL

E-Cell VSSUT presented Trading Pro, a thrilling technical event showcased at Samavesh X Vassaunt. Skilled traders from various fields impressed the crowd with their strategies. With over 20 teams competing in three rounds, both seasoned professionals and newcomers vied for the top spot.

BIDDING BONANZA

E-CELL

E-Cell VSSUT conducted "Bidding Bonanza", where students invested in outdated logos, evaluated based on present-day revenue potential. This fun-filled competition attracted widespread participation, testing entrepreneurial skills, strategic thinking, and financial acumen.

EVENTS 2024

Annual Technical Fest 2024

SPARK TANK

E-CELL

"Spark Tank", facilitated by E-Cell VSSUT, where students showcased their exceptional pitching skills to secure the winning deal. The event highlighted their talents across various fields, and the excitement and determination of the participants made it a captivating experience.

VSIEGE

ENIGMA

During both days of Samavesh X Vassaunt, the VSiege gaming tournament concluded with the VSSUT Map in TDM mode. Participants showcased intense battles and skillful strategies, captivating gaming enthusiasts with the game developed by ENIGMA members. It was a thrilling showdown where players demonstrated their prowess to emerge victorious in this ultimate gaming challenge

EVENTS 2024

Annual Technical Fest 2024

BLIND CODE

ENIGMA

On March 24th, from 2pm to 4pm, Blind Code, a pioneering programming competition, unfolded. Participants wrote code without visual feedback, showcasing their conceptualization and execution skills. Developed by ENIGMA Club members, it emphasized the significance of vision in coding.

SERVER ATTACK

ENIGMA

During the Samavesh X event on March 23rd, from 2pm to 4pm, the Server Attack virtual event unfolded, developed by the team of ENIGMA. It merged strategic prowess with tech skills in simulated cyber battles, where participants outsmarted, infiltrated, and secured data, conquering the digital frontier with wits and code.

EVENTS 2024

Annual Technical Fest 2024

PROTOCOL PUNDIT

IEEE

The Women in Engineering powered the objective of Women empowerment through Seminars. Protocol Pundit was the thought provoking debate competition in which the members of IEEE VSSUT Student Branch namely Subhranshu Shekhar Panda bagged the first Prize.

FIGMA-PROJECT SHOWCASE

IEEE

The Figma boot camp was launched to showcase the technical innovation of the student members in which the esteemed Vice Chair Debabrata Sahoo baged the first prize. Hence earned glory for the society.

EVENTS 2024

Annual Technical Fest 2024

TECHXPLORE

IEEE

IEEE VSSUT Student Branch has organized the Paper Presentation competition on the occasion if SAMAVESH. It was included with various research ideas by participants, judged and guided by the jury members. This competition gave an insight into exploration to research and development. Shiv Shankar Patel has secured the winning prize

WIEPOWER

IEEE

WiePower - This event in SAMAVESH organized by the IEEE VSSUT SB for lighting the 'Women in Engineering' domain of IEEE. This is the ideathon in which students has presented their ideas in various fields where women empowerment is needed. Ishita Pani has won the compitition by impressive presentation to jury members.

EVENTS 2024

Annual Technical Fest 2024

SPLASH DOWN

IIC

Splash Down", a fun-filled event, was organised by the Idea Innovation Cell in the row of events in the Samavesh-2024, the annual technical fest of VSSUT, Burla. The event was roughly based on the making and propelling of water rockets, where the rockets vied to reach the highest altitude of all. The event was organised from 23rd-25th March 2024 on the premises of the Biju Pattanaik E-Learning Centre. The rockets were tested for the most efficient propulsion, thus shortlisting the winners of the event. The event was successful and added value and joy to the tech fest.

SPACE DEFENCE EXPO

IIC

The Space Defence Expo was an event that showcased the various works of the ISRO, the most prominent Space organisation in India. It featured ISRO's "Space on Wheels" where rocket models were showcased. The expo provided a platform for engaging space technology and defence innovations. It attracted a huge base of space enthusiasts from VSSUT and beyond, who came in large numbers and made the programme successful.

EVENTS 2024

Annual Technical Fest 2024

ROBOSUMO

ROBOTICS

In RoboSumo, two robots faced off in an intense battle, manually controlled by team members. Participants strategized on design and movement, as their skills in maneuvering the robots determined who would successfully push their opponent out of the circular ring.

DEATH VALLEY

ROBOTICS

In RoboSumo, two robots faced off in an intense battle, manually controlled by team members. Participants strategized on design and movement, as their skills in maneuvering the robots determined who would successfully push their opponent out of the circular ring.

EVENTS 2024

Annual Technical Fest 2024

MAZE HUNT

ROBOTICS

In Maze Hunt, robots were challenged to find their way through a complex maze filled with twists and turns. Participants designed their robots to utilize sensors and algorithms, striving to efficiently locate the exit while competing for the best time.

TYRE ON FIRE

VEERSRACERS

One of the most intense events was Tyre on Fire, where participants took on a thrilling two-wheeler obstacle course. Riders had to show off their agility and quick reflexes as they weaved through sharp turns, narrow pathways, and tricky ramps. The crowd was on edge, cheering loudly as each competitor powered through, trying to beat the clock without hitting any obstacles. Those who stayed focused and finished the fastest took home the bragging rights!

EVENTS 2024

Annual Technical Fest 2024

TIMBER TOWER

VEERSRACERS

For a different kind of challenge, Timber Tower put participants' patience and precision to the test. Imagine Jenga, but supersized! Teams carefully removed and stacked large wooden blocks, trying not to send the tower crashing down. Every move made the tower wobble a little more, and with each round, the stakes got higher. It was a real nail-biter, with the last-standing team walking away victorious.

TOPSY RUN

VEERSRACERS

The most creative event of the fest was definitely Topsy Run. Teams built small, battery-powered cars out of cardboard and then raced them through an obstacle course. It wasn't just about who could go the fastest—teams also had to get creative with their designs, making sure their cars were both speedy and stable. The sight of these homemade cars zooming across the track had the audience cheering and laughing. It was a perfect mix of engineering smarts and playful competition.

EVENTS 2024

Annual Technical Fest 2024

METABONDS

MME DEPARTMENT

The most creative event of the fest was definitely Topsy Run. Teams built small, battery-powered cars out of cardboard and then raced them through an obstacle course. It wasn't just about who could go the fastest—teams also had to get creative with their designs, making sure their cars were both speedy and stable. The sight of these homemade cars zooming across the track had the audience cheering and laughing. It was a perfect mix of engineering smarts and playful competition.

TECHQUIZZARD

The Tech Quiz event served as a significant highlight of VSSUT's annual technical fest. Designed to challenge and engage students in a competitive environment, it tested their expertise across diverse technological fields. Held during the first two days of Samavesh X Vassaunt, the event attracted a large number of quiz enthusiasts, showcasing enthusiastic participation and display of knowledge.

EVENTS 2024

Annual Technical Fest 2024

VIRTUAL ESCAPADE

The Virtual Escapade event, held during all three days of Samavesh X Vassaunt, offered participants an immersive experience using virtual reality (VR) technology. Through the use of VR headsets, students explored diverse virtual environments and engaged in interactive activities that encouraged creativity and innovation. The event was highly successful, providing an exciting platform for technological engagement and exploration.

E-SPORTS

Participants were engaged in competitive gaming activities, fostering camaraderie and friendly competition among them. It was a skill-based entertainment and a platform for students to showcase their talents. It was aimed to promote cognitive growth and a good opportunity for the new gaming enthusiasts to advance.

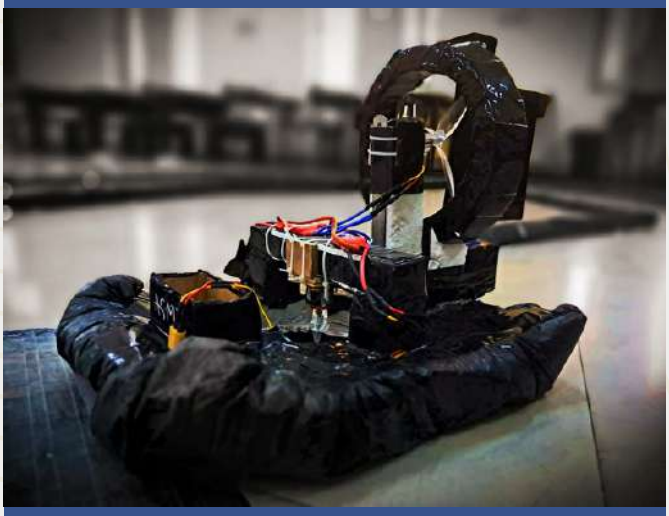
PITCH PERFECT

Conducted in the first two days of Samavesh X Vassaunt, The Pitch perfect encouraged participants to tackle real-world challenges through Powerpoint presentations. Individuals and teams selected problem statements and proposed creative solutions. The event successfully promoted critical thinking, innovation, and collaboration, providing a platform for participants to showcase their problem-solving skills and exchange ideas. It was a valuable experience encouraging intellectual engagement.

CLUB ORGANISED EVENTS 2024

The ASME technical team at VSSUT has been equally active on the project development front, successfully designing and building two impressive prototypes:

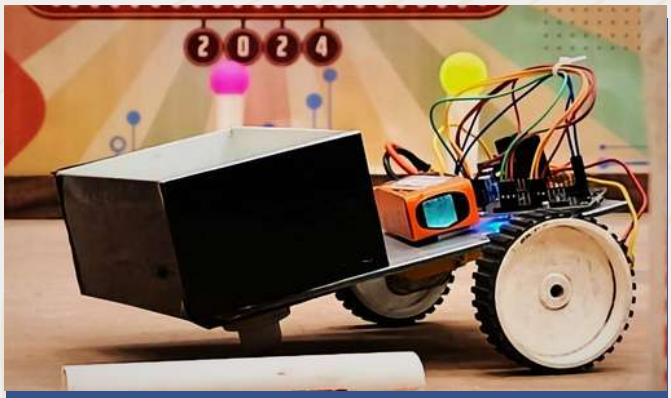
VEER-HOVER : A MULTI-ENVIRONMENT RC VEHICLE



The hovercraft, designed as an RC vehicle capable of operating on both land and water, was one of the key technical projects undertaken in 2024. The team developed two prototype models and one fully functional 3D-printed version, all adhering to the rules of the ASME IAM3D competition. Utilizing air pressure and thrust for movement, these hovercrafts demonstrated high maneuverability and versatility across different terrains, making them suitable for both competitions and future research projects.

RC CARRIER : A PAYLOAD-TRANSPORTING MARVEL

The RC Carrier is another project that showcases the ingenuity of the ASME technical team. This remotely controlled bot, equipped with a WiFi module and controlled via an



Android app, features a payload carrier at the front. Its innovative design allows for the smooth and efficient transport of cargo, meeting the specifications outlined in the ASME Student Design Competition rules. The RC Carrier represents a blend of functional design and technical precision, with potential applications in automation and logistics.

A PROMISING FUTURE

As the ASME VSSUT student section continues to grow in both size and capability, 2024 has set a new standard of achievement. The team's commitment to innovation, collaboration, and technical mastery is sure to lead to even greater accomplishments in the years to come.

E-CELL

Entrepreneurship Development Program

E-SUMMIT

E-Cell VSSUT had the privilege to organize Western Odisha's largest flagship event, E-Summit 2k24, a two-day entrepreneurial extravaganza. Day one featured the Start-up Odyssey, where Mr. Khalid Waani and Mr. Chinmay Satpathy, founder of Village, shared insights on their entrepreneurial journey. VSSUT student Junaid Ahmed unveiled his app, WalkingPal.

The day also included a seminar on Tiger Conservation and a stand-up comedy show by Debarchan Mishra. Day two's Leadership Summit brought together experts for a panel discussion and networking, featuring Mr. Vonkayala Venkata Giri, Dr. Debabrata Giri, Mr. Satyajeet Patnayak, and Mrs. Archana Tripathy. Creators Corner spotlighted Samar Pratap Nayak.

The event concluded with the Ideathon Pitch and guest felicitations, leaving participants deeply motivated and inspired.

CHAI PE CHARCHA

E-Cell, VSSUT launched the inaugural episode of Chai Pe Charcha, featuring Mr. Sourav Khandelwal, founder of DahiBara Express and SCOMM India, was the guest speaker. His inspiring journey from a local startup to a successful venture ignited enthusiasm among students. The session focused on self-employment and entrepreneurship, providing an overview of the Techno-Management Club and its initiatives. This event encouraged students to dream bigger and pursue their entrepreneurial ambitions.

AI/ML AND AWS WORKSHOP WITH VIMAL DAGA

Team Enigma had the profound honour of having the world record holder and the founder of Linux World- Mr. Vimal Daga on 14th January 2024 for a workshop on AWS cloud with artificial intelligence. The 6-hour-long workshop apprised the students about the basics of Python, AWS cloud and integrating artificial intelligence with it.

Throughout the workshop, he emphasized the importance of continuous learning and adaptability in the rapidly evolving field of technology.

He also shared anecdotes of overcoming setbacks and leveraging failures as learning opportunities. Overall the AWS cloud workshop was a remarkable opportunity for students to glean wisdom from a seasoned professional in the field and it turned out to be a great success.

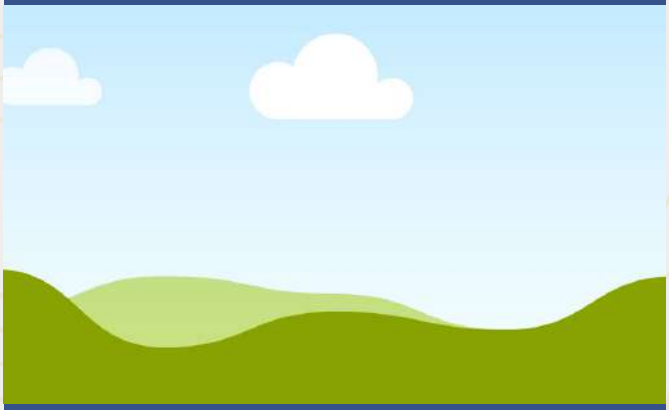
LIFT OFF C++

Enigma recently organized a bootcamp called LOC++, tailored for freshers eager to delve into the world of coding. Spanning three weeks, this program provided students with a comprehensive introduction to C++, supplemented by topic-specific assignments assigned to groups of 5-6 students, each under the guidance of a mentor. The platform facilitated open discussions to address any queries students encountered, fostering an environment conducive to learning. Additionally, weekly contests were held to assess and encourage their progress, enhancing their skills and nurturing their passion for coding.

EXPERT TALK ON "DATA-DRIVEN PREDICTIVE ANALYSIS IN R"

Department of Electrical Engineering in association with the IEEE VSSUT Student Branch organized an Expert Talk by Dr. Monalisa Pattanaik, Professor, Department of Mathematics and Statistics, Sambalpur on the topic "Data-driven Predictive Analysis in R" on 09-03-2024 in E-Learning Centre, VSSUT, Burla.

A lot of our BTech undergraduates, MTech, and Ph.D. scholars attended the talk, along with our esteemed faculties. It was an enlightening talk about this vast spreading domain of professional careers. The talk ended with a fruitful interaction session, with many queries and questions being raised and solved.



2 DAYS WORKSHOP ON ADVANCEMENTS IN DEFENCE TECHNOLOGY (RGADT-2024)

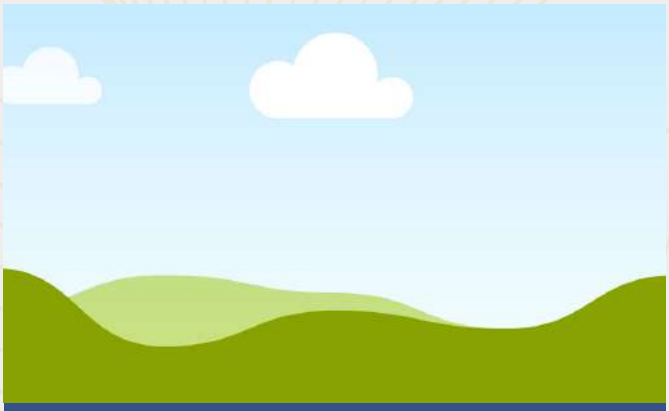
On 10th - 11th April 2024, the IEEE Veer Surendra Sai University of Technology (VSSUT) Student Branch in collaboration with IEEE COMSOC Student Chapter, VSSUT, Burla, and IEEE COMSOC Chapter, Integrated

Test Range, Defense Research and Development Organization, Chandipur, organized the RGADT-2024 (Recent Growth and Advancement in Defence Technology-2024) workshop, in the E-Learning Centre, VSSUT, Burla, attracting over 200 participants. Leading scientists Dr. Pradipta Roy, Mr. Amiya Kumar Das, and Dr. Arun Kumar Ray illuminated the stage with groundbreaking revelations on advancements in defense technology.

Concluding the event, Prof. Harish Kumar Sahoo extended heartfelt gratitude, bringing to a close two days filled with enriching learning experiences and valuable networking opportunities.

ECO VISSION 2024

The IEEE VSSUT Student Branch in collaboration with the IEEE VSSUT CASS Student Chapter organized the ECO VISSION 2024. It was a 2-day event on 5th and 6th June but had an amalgam of opportunities and a wide range of multi-domain competitions which gave ample exposure to the students of our university. We also received a lot of participation from students outside our university, as they showered our



student branch with enthusiasm for our events and the recognition we work for.

The event comprised our flagship Symposium event, an essay writing competition, a poster presentation event, an ocean photography competition, and a quiz and puzzles challenge. The different competitions and challenges sparked a lot of curiosity and excitement in the young minds and proved to be a successful celebration altogether.

SHEASPIRE-2024

The IEEE VSSUT WIE (Women in Engineering) Affinity Group in collaboration with the IEEE VSSUT Student Branch organized a week-long event She Aspire – 2024. It was truly a wonderful way to celebrate women in our professional path, along with a gem of an experience for all the undergrads of our university. It lasted a long span from 24th June 2024 to 1st July, in virtual mode. It started with a webinar on "AI Functional Safety".

It was led by Jyotika Athavale, the 2024 President of the global IEEE International Computer Society.

Then, another on "AI in a nutshell" by Mrinal Karvir, the 2024 Secretary of IEEE Computer Society and the Vice Chairperson of IEEE SCV WIE. The following days were composed of a Story Writing & Telling competition, an Ideathon Challenge, a Strategy-making challenge, and Cryptic Deduction. This array of multi-domain events broadened the minds of our university students.

CANSAT STUDENT COMPETITION FINAL 2024

The CANSAT competition, organized by InSpace and the Astronautical Society of India (ASI), brings together innovation, creativity, and challenges in the world of space science. Our team, V-Sat, has proudly advanced to the groundbreaking finale, marking a historic achievement as the only team from Odisha to soar to such heights in this prestigious event.

ROBOTICS

Robotics Society

PROJECT SHOWCASE

SMART WAITER- Introducing the Smart Waiter (Stage 1): a futuristic dining companion revolutionizing the restaurant experience. Powered by Cytron motor drivers and controlled by an Arduino Uno microcontroller, it glides effortlessly on three Omni wheels, providing seamless navigation between tables. With its integration with your smartphone via HC-05 Bluetooth module, you can summon the Smart Waiter, place orders, and request assistance with a few taps.

Robotic Arm- Manufactured through cutting-edge 3-D printing technology, the Robotic Arm is meticulously designed for precise movements and versatile functionality across various tasks. OpenCV seamlessly interprets human gestures, providing users with an intuitive control interface for the robotic arm. This feature not only elevates human-robot interaction but also simplifies the overall control mechanism.

UAV Drone- The Disaster Management UAV is a cost-effective hexacopter specifically designed for swift relief operations in coastal Odisha. With a 4kg payload capacity, it can transport essential supplies like medical kits, food, and communication devices to hard-to-reach areas during natural disasters. Equipped with GPS stabilization, the UAV maintains precise control, even in challenging conditions, ensuring reliable navigation.

ROBOTICS BOOTCAMP

The Robotics Society recently organized an engaging and interactive bootcamp that delved into the three main domains of robotics: Arduino and Python coding, electronics, and structural design. This comprehensive workshop aimed to equip participants with practical skills and insights, crucial for developing robotics projects in the future.

The sessions covered a variety of essential topics, including the fundamentals of Arduino microcontroller programming, Python scripting for automation, and basic electronics to understand the underlying components of robotic systems. Additionally, participants explored 3D CAD design, enabling them to conceptualize and create their own robotic structures.

The bootcamp attracted a group of enthusiastic individuals eager to expand their knowledge and skills in robotics. Guided by experienced club members, the sessions offered hands-on learning opportunities, fostering creativity and encouraging participants to pursue robotics projects.

This initiative not only provided valuable experience but also built a community of robotics enthusiasts ready to take on new challenges.

VEERSRACING

Society of Automotive Engineers

ARAVALLI TERRAIN VEHICLE CHAMPIONSHIP 2024

Team VEERss Racing, the official all-terrain vehicle (ATV) team of Veer Surendra Sai University of Technology (VSSUT), has once again proven its mettle at the prestigious Aravalli Terrain Vehicle Championship (ATVC) India 2024. The event, hosted by the Nutan Maharashtra Institute of Engineering and Technology (NMIET) under the aegis of Pimpri Chinchwad Education Trust (PCET) in Pune, Maharashtra, from March 20th to March 24th, saw intense competition with 70 teams from across the country. Through sheer determination, innovation, and technical expertise, Team VEERss Racing emerged as one of the top contenders, achieving exceptional success.

Team VEERss Racing excelled in the competition, securing top national rankings: AIR 2 in Mega Marketing, AIR 4 in Business Presentation, AIR 6 in Cost Presentation, and AIR 7 in Design Report. Their success showcased not only technical expertise but also strong marketing and business strategy skills, distinguishing them in the field.

The Aravalli Terrain Vehicle Championship (ATVC) challenges engineering students to design, develop, and test all-terrain vehicles while integrating business skills into the competition.

Unlike other motorsport events, ATVC requires teams to create cost-effective, efficient vehicles and develop marketing strategies to prove their commercial viability. This blend of technical and business demands prepares students for real-world scenarios where engineering must align with business objectives.

Team VEERss Racing's standout performance in business categories highlights their well-rounded approach. Their second-place finish in the Mega Marketing Round, out of 70 teams, reflects their creativity and strategic thinking. Securing AIR 4 in the Business Presentation further showcases their strong grasp of the economic aspects of vehicle production and commercialization.

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In the technical categories, Team VEERss Racing impressed with AIR 6 in Cost Presentation, showcasing their ability to develop a cost-efficient, high-performance vehicle. In the technical categories, Team VEERss Racing impressed with AIR 6 in Cost Presentation, showcasing their ability to develop a cost-efficient, high-performance vehicle.

Team VEERss Racing's success at ATVC India 2024 continues VSSUT's tradition of excellence in all-terrain vehicle design. Their achievements inspire pride in the university and region, motivating future engineers to pursue innovation with passion and dedication.

Team VEERss Racing's journey at ATVC India 2024 underscores the value of teamwork and leadership, demonstrating how collaboration and shared expertise drive innovative solutions in engineering.

Team VEERss Racing's success at ATVC India highlights the importance of collegiate motorsports in fostering innovation and problem-solving among engineering students.

Their achievements showcase both VSSUT's excellence and the broader potential of Indian engineering talent on the national and global stage.

In conclusion, Team VEERss Racing's stellar performance at ATVC India 2024 showcases how passion, dedication, and teamwork drive success in engineering and business.

Their journey will inspire future engineers and leave a lasting impact on collegiate motorsports. Here are the achievements of VEERss Racing at ATVC 2024:

- 1st Runner-Up in the Mega Marketing Round
- AIR 5 in the Business Plan
- AIR 6 in the Cost Evaluation
- AIR 7 in the Design Evaluation
- Overall Rank: AIR 8


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