



Rajarajeswari College of Engineering

(An Autonomous Institute, Affiliated Visvesvaraya Technological University, Belagavi,
Approved by AICTE, UGC & GoK, Accredited by ISO 9001-2015 Certified Institution)
Sponsored by: MOOGAMBIGAI CHARITABLE AND EDUCATIONAL TRUST



Department of Electrical & Electronics Engineering

Report on TechFusion 2024 A National Level Technical Event

Organized by: Department of EEE, Rajarajeswari College of Engineering, Bengaluru

Date of Event: October 24–25, 2024

Introduction:

The EEE Department of Rajarajeswari College of Engineering successfully hosted **TechFusion 2024**, an annual technical event aimed at fostering innovation, technical expertise, and collaborative skills among engineering students. The two-day event included diverse competitions and exhibitions designed to challenge participants' creativity, technical knowledge, and practical application abilities.

INAUGURATION:

The grand inauguration of TechFusion 2024 took place on October 24, 2024 at 1:30 PM, marking the commencement of a two-day technological festival organized by the EEE Department at Rajarajeswari College of Engineering. The event is aimed at promoting technical knowledge, innovation, and interdisciplinary collaboration among engineering students. The inauguration ceremony was attended by esteemed dignitaries, faculty members, and enthusiastic students from various departments.

Welcome Address: The inauguration began with a warm welcome by Dr. P. Ebby Darney, Head of the Department of EEE, who thanked the dignitaries, faculty, and students for their presence and support. Dr. Darney provided an overview of TechFusion 2024, highlighting the event's objective to encourage innovation, foster teamwork, and showcase the technical abilities of students across various engineering domains.

Inaugural Address by the Principal: Dr. R. Balakrishna, Principal, delivered the inaugural address, congratulating the EEE Department for organizing an event of such scale and vision. He emphasized the importance of such technical events in the holistic development of engineering students, bridging the gap between theoretical knowledge and practical application. Dr. Balakrishna encouraged students to take full advantage of the platform, embrace innovative thinking, and engage actively in the various competitions and exhibitions that TechFusion 2024 offered.

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Speech by the Vice Principal: Dr. J. Amutharaj, Vice Principal, addressed the gathering with inspiring words, applauding the dedication and creativity of the organizing team. He underscored the role of technical festivals like TechFusion in enhancing students' problem-solving skills and providing a stepping stone for their future careers. Dr. Amutharaj urged the students to push the boundaries of innovation and highlighted the significance of cross-disciplinary collaboration in achieving technical excellence.

Overview of Events: Pavan B, Student Secretary presented an overview of the events lined up for TechFusion 2024. He outlined the goals of each event, emphasizing how they are designed to challenge students' creativity, technical skills, and teamwork.

The dignitaries then proceeded to officially inaugurate TechFusion 2024. This moment was met with enthusiastic applause from the audience, marking the launch of two days of learning, creativity, and technical exploration.

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DEPARTMENT OF ELECTRICAL & ELECTRONICS ENGINEERING

Organises

TECHFUSION 2024
A NATIONAL LEVEL TECHNICAL EVENT

- Sparkathon 2024**
A Hackathon for Engineering Innovation - Hardware/Software/Open Innovation
- TechSpark Expo**
An Expo for Engineering Innovations
- RoboSphere**
Capture the essence of Robo Race and Fastest line follower

PRIZE RS. 50000

REGISTER NOW

MORE INFO

THURSDAY AND FRIDAY
24th and 25th October 2024

No.14, Ramohalli Cross, Kumbalgeodu, Mysore Road, Bengaluru - 560 074, Karnataka, India. www.rcce.org

Dr. R. Balakrishna Principal
Dr. P. Ebby Darney HoD - EEE
Prof. Sincy Elezabeth kuruvila Co-ordinator





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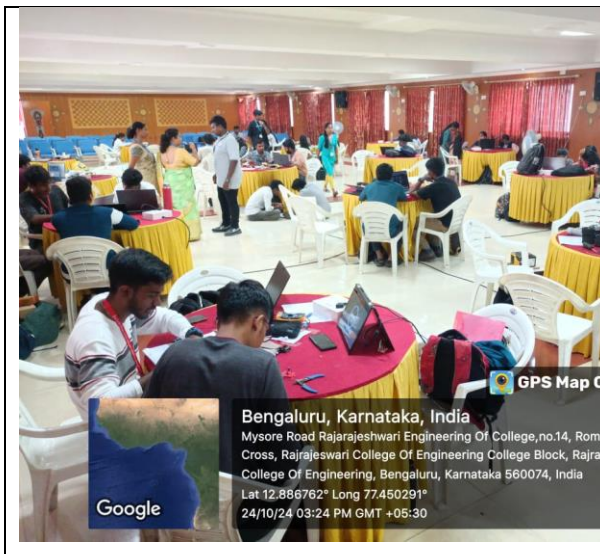


Event Overview:

TechFusion 2024 comprised the following events:

1. Sparkathon 2024 – A Hackathon for Electrical Innovation

- **Timing:** 2:00 PM on October 24, 2024, to 2:00 PM on October 25, 2024
- **Objective:** To encourage students to develop innovative solutions in the form of hardware and software projects.
- **Key Coordinators:** Prof. Avinash C M, Prof. Shivalingaiah.K.L
- **Jury:** Er. Ragupathi, AI Developer and Senior Principal Engineer, Dell India Pvt Ltd.



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2. TechSpark Expo – Engineering Innovations Expo (Open to All Streams)

- **Timing:** 10:30 AM to 2:00 PM on October 25, 2024
- **Objective:** To showcase cutting-edge projects developed by students from various engineering disciplines.
- **Key Coordinator:** Prof. Nandini N, Prof. Udhyami M. B.
- **Jury:** Dr. Vijayshree Gopal, Assistant Professor, RNS Institute of Technology, and Prof. Nagasuma CV, Assistant Professor, Soundarya Institute of Management and Science, Bangalore



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3. RoboSphere – Featuring Robo Race and Fastest Line Follower Competitions

- **Timing:** 10:30 AM to 2:00 PM on October 25, 2024
- **Objective:** To test students' robotic designs in speed and precision tasks.
- **Key Coordinator:** Prof. Prutha G, Prof.Kiruthika K



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The *TechFusion 2024* event at Rajarajeswari College of Engineering saw impressive participation from 17 colleges across Karnataka.

Participating Colleges:

1. BNM Institute of Technology, Bangalore
2. Rajarajeswari College of Engineering, Bangalore
3. BMS Institute of Technology, Bangalore
4. MS Ramaiah University of Applied Sciences, Bangalore
5. Sri Krishna Institute of Technology, Bangalore
6. Dayananda Sagar College of Engineering, Bangalore
7. Global Academy of Technology, Bangalore
8. Ramaiah Institute of Technology, Bangalore
9. ACS College of Engineering, Bangalore
10. T John Institute of Technology, Bangalore
11. Shetty Institute of Technology, Kalaburagi
12. PES College of Engineering, Mandya
13. G Madegowda Institute of Technology, Mandya
14. AMC Engineering College, Bengaluru
15. Sri Siddhartha Institute of Technology, Tumkur
16. Sambhram Institute of Technology, Bengaluru
17. GM Institute of Technology, Davangere

Event Registrations:

A total of **57 teams** registered across various events:

- Sparkathon 2024 (Hardware/Software Open Innovation): 17 teams
- TechSpark Expo (Engineering Innovations Expo – Any Stream): 15 teams
- RoboSphere:
 - Robo Race: 16 teams
 - Fastest Line Follower: 9 teams

The event brought together **200** talented students across Karnataka showcasing innovation and engineering skills across different streams, contributing to the success of TechFusion 2024.



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Highlights and Winners:

Sparkathon 2024 (Hardware/Software Open Innovation)

- **1st Place:** Team "Smart Sparks" from BNM Institute of Technology for *The AI Powered Braille*.
- **2nd Place:** Team "WisdomByte" from Rajarajeswari Engineering College for *Smart Billing Shopping Trolley*.
- **3rd Place:** Team "Storm Breaker" from Rajarajeswari Engineering College for *Rescue Bot*.

TechSpark Expo (Engineering Innovations Expo)

- **1st Place:** Team "PROTI-ON ENERGY" from Dayananda Sagar College of Engineering for *FeRON: Hybrid System of Iron-Air Batteries and Supercapacitors*.
- **2nd Place:** Team "INNOVATORS" from Global Academy of Technology for *Haptic Instrument using Leap Motion*.
- **3rd Place:** Team "Notarc" from Sri Krishna Institute of Technology for *Drone Technologies*.

RoboSphere - Robo Race

- **1st Place:** Team "Tech Titans" from T. John Institute of Technology (Time: 3.52 sec).
- **2nd Place:** Team "Godliked" from AMC Engineering College (Time: 4.08 sec).
- **3rd Place:** Team "Blue Beetle's" from Shetty Institute of Technology (Time: 5.46 sec).

RoboSphere - Fastest Line Follower

- **1st Place:** Team "Blue Beetles" from Shetty Institute of Technology (Time: 23.59 sec).
- **2nd Place:** Team "Robusta" from Shetty Institute of Technology (Time: 26.01 sec).
- **3rd Place:** Team "Godliked" from AMC Engineering College (Time: 26.34 sec).

VALEDICTORY FUNCTION:

The valedictory function of **TechFusion 2024**, a signature event of the EEE Department at Rajarajeswari College of Engineering, took place at 3:00 PM on October 25, 2024. This marked the successful conclusion of two days filled with innovation, technology



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demonstrations, and competitive events. The function was attended by esteemed dignitaries, faculty, students, and participants from various institutions, all gathered to celebrate the accomplishments of the students and recognize outstanding contributions.

Welcome Address: The function began with a warm welcome by Dr. P. Ebby Darney, Head of the Department of EEE, who extended gratitude to the dignitaries, coordinators, and participants for their enthusiastic involvement. Dr. Darney emphasized the department's commitment to providing a platform for young engineers to explore, innovate, and showcase their technical prowess.

Principal's Address: Dr. R. Balakrishna, Principal of Rajarajeswari College of Engineering, commended the efforts of the EEE Department in organizing TechFusion 2024, highlighting its importance in building technical skills, fostering teamwork, and preparing students to tackle industry challenges. He also praised the creativity and perseverance displayed by the participants across various events.

Dr. J. Amutharaj, Vice Principal, congratulated the winners and encouraged all participants to continue their journey in innovation and research, stressing the role of such technical events in shaping well-rounded engineers.

Guest Speeches:

Er. Ragupathi, AI Developer and Senior Principal Engineer, shared insights into the latest advancements in AI and how events like TechFusion align with industry needs by equipping students with critical skills. His message motivated students to pursue knowledge in emerging fields and remain adaptable in the face of technological advancements.

Er. Prithvi Gowda, Chief Technology Officer at Techspiration India Pvt. Ltd, highlighted the importance of technical competitions in fostering problem-solving and innovation among young engineers. He spoke about the evolving tech landscape and the role students will play in defining the future.

Er. Sunil, Chief Finance Manager at Techspiration India Pvt. Ltd, discussed the value of financial literacy and management in engineering careers. His speech inspired students to develop an understanding of business principles alongside technical skills.

Award Distribution: The dignitaries presented awards to the winning teams across the various events of TechFusion 2024, including Sparkathon, TechSpark Expo, and RoboSphere



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competitions. The students were applauded for their innovative projects and teamwork, with each team receiving certificates, trophies, and prizes in recognition of their achievements.

Vote of Thanks: The function concluded with a heartfelt vote of thanks delivered by Prof. Sincy Elizabeth, the event coordinators, who expressed gratitude to the dignitaries, faculty, participants, and organizing team. She acknowledged the invaluable support of the EEE Department and the college administration in making TechFusion 2024 a resounding success.



Conclusion:

TechFusion 2024 successfully brought together the best and brightest engineering minds to showcase innovative projects, collaborative skills, and technical expertise. The range of events, including Sparkathon, TechSpark Expo, and RoboSphere, offered a platform for

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students to push their creative and analytical limits. Through the diverse lineup of projects presented, TechFusion 2024 not only highlighted the capabilities of students across disciplines but also underscored the importance of interdisciplinary problem-solving and real-world application of engineering concepts.

The EEE Department of Rajarajeswari College of Engineering extends its heartfelt gratitude to all participants, coordinators, and dignitaries for their invaluable contributions, which made TechFusion 2024 a truly memorable and impactful event. The enthusiastic participation and high-quality projects highlighted a promising future for engineering. The event was led by Overall Coordinators Dr. R. Arul Jose, Associate Professor, and Prof. Sincy Elizabeth, Assistant Professor, Department of EEE.

Coordinator

HoD-EEE

Principal

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