

**IEEE Malta Section****Dr Conrad Attard****IEEE Malta Section & IEEE Computer Society - 2025 Events Report**

1. **Practical Approach to Design Mobile Apps for Girls Bootcamp**
  - **Date:** 3rd, 5th, 9th September 2024 (Online)
  - **Time:** 09:00 - 12:30
  - **Participants:** 25
2. **EY Engage Digital Health Panel Discussion and IEEE Malta Stand**
  - **Date:** 30th May 2024
  - **Includes:** Onsite stand
  - 500 Participants
3. **IEEE Region 8 Robot Championships**
  - **Competition event**
  - Over 1800 participants have registered to the two day event to participate in different activities organised.
  - The chair reported that the IEEE Student branch won a number of awards during the championship from the competitions carried out.
  - The Chair also reported that the section received sponsorships for two television special programmes on the championships which will be aired in April..
4. **Webinars IEEE Region 8 Robot Championships**
  - **Total:** 1 information sessions
  - Total: 5 webinars with distinguished guests on soft skills and technical skills covering subjects project management, how to budget for the robot championship, rules regulations and branding among others. These where delivered by IEEE volunteers from different committees
5. **Meetings**
  - **Total:** 3 since the last region 8 meeting.
6. **Tech Expo**
  - **500 attendees.** The Malta Section in collaboration with IEEE Computer Society and IEEE Malta Student branch organised various .
7. **Science in the City (SITC)**
  - **RoboPlay at the capital city of Malta in one of the largest STEM event as part of EU research night held on the last friday of September..**
  - **Launch of Region 8 Robot Championship Event**
  - **5000 attended the events.**
8. **Bootcamp on AI, IoT, and Digital Health**
  - **Date:** 25th July 2024
  - **Venue:** Campus Hub
  - **Time:** 09:00 - 14:00

- **Participants:** 39
- 9. **ERP EY Panel Discussion**
  - **Date:** Thursday, 5th December 2024
  - **Participants:** 30
  - **Distinguished Guests:** 4
- 10. **Expo FICT (Hybrid Format)**
  - **IEEE Computer Society - Distinguished Guest Speaker**
- 11. **St. Michael's School Robot Play - STEM FAIR Event**
  - **120 Students have interacted with various activities that were organised.**
- 12. **Ongoing Pilot: IEEE Malta section is working on a student project to have a plan to gamify STEM topics such that students can learn in a fun way.**
- 13. **Donation to Church schools of IEEE STEM materials through the collaboration from one of our industry partners.**
- 14. **February 2025: Meeting with MCAST principle and engineering director to create an MOU to set up IEEE in the college and involve them in our section.**
- 15. **IEEE AGM organised where members of the committee reported different initiatives that have been organised.**
- 16. **January 2025 We met DFK who will be taking care of our accounts to ensure all our legal and financial aspects adhere to the local regulations that VO in Malta needs to abide to.**
- 17. **Final year project competition of university students that have graduated from faculty of engineering and faculty of ICT. Three awards will be given during our annual awards ceremony. 11 students were shortlisted by a panel of judges from industry and academia.**
- 18. **Symposium: The Power of Digital Transformation in Healthcare: Innovations and Impact in collaboration with Faculty of ICT and Faculty of Health Science.**

**Date:** Thursday, 3 April 2025

**Venue:** South Auditorium, Block A, Level 1, Faculty of Health Sciences, Mater Dei Hospital

### **Section Vitality.**

Call for nominations were sent in October 2024. Only one nomination for each post was submitted. The current vice chair could not take the role of chair. The section ExCom is organised regularly and we organise several activities to involve our members and encourage new ones to join IEEE committees. In the coming months we hope to attract more volunteers to choose to take the excom roles. As current chair I have already started organising meeting and mentoring to ensure a proper handover after my term is over.



## **Business Plan and Pitch Submissions Report**

### *IEEE Region 8 Robot Championships Malta 2024*

**As part of the IEEE Region 8 Robot Championships held in Malta in 2024, all participating teams were invited to submit a detailed business plan and deliver a professional pitch. This initiative aimed to assess the commercial viability, strategic planning, and innovative potential behind their robotics projects, encouraging entrepreneurial thinking alongside engineering excellence.**

**The submissions were assessed on several criteria, including innovation, financial planning, clarity, feasibility, stakeholder engagement, and delivery. The following teams demonstrated exceptional strengths in various areas, with Leones Robotics and IEEE Eitri recognised as the top-performing teams for their outstanding business strategy and presentation.**

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### **Leones Robotics – IEEE Malta Section**

**Team Members: James Gatt, Antonio Galdes, Luca Spiteri**

**Affiliation: Local Research Institution, Industry, Non-Tech Companies**

**Project Focus: Robot Building**

**Highlights:**

- **Clear and focused business objectives**
  - **Strong engagement with local industry partners**
  - **Professional pitch delivery and real-world commercial awareness**
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### **IEEE Eitri – Norway Section**

**Team Members: Martin Økter, Jørgen Borge, Inge Johan Johansson**

**Affiliation: Academic, Industry and Union Representation**

**Project Focus: Robot Building, Travel, Accommodation, Promotional Material**

#### **Highlights:**

- **Extensive budget and strategic promotional plan**
- **Strong emphasis on branding and outreach**
- **Impressive visual and narrative elements in pitch delivery**



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### **IEEE RAS ENETCOM SBC – Tunisia Section**

**Team Members: Ayoub Walha, Mohamed Aziz Jamoussi, Bilel Mezghani**

**Affiliation: Academic, Research, IEEE Units, Industry and Non-Tech Companies**

**Project Focus: Robot Building**

#### **Highlights:**

- **Clear financial structure and resource management**
- **Broad local and international stakeholder engagement**

## **Electro Warriors – UK & Ireland Section**

**Team Members:** Adil Farooq, Tadhg Creagh, Eoghan Mooney

**Affiliation:** Academic, Industry, IEEE Unit

**Project Focus:** Robot Building and Travel

### **Highlights:**

- **Balanced technical and business proposal**
- **Collaborative partnerships with academic and industry bodies**



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## **GSGShield – IEEE Malta Section**

**Team Members:** Carsten Karl Grech, Vanya Gelfo, Aislinn Seguna

**Affiliation:** Academic, Research, Industry and Non-Tech Companies

**Project Focus:** Robot Building

### **Highlights:**

- **Effective use of limited resources**
- **Focused on practical delivery within local contexts**

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## **Mortal Kombat – Independent Team (Malta)**

**Team Members:** Shaima Zaffar, Adarsh Baburaj, Aman Nishad

**Affiliation:** Fabrication Company and Non-Tech Collaborators

**Project Focus:** Robot Building

### **Highlights:**



The 124<sup>th</sup> IEEE Region 8

<http://april-2025.ieeer8.org/>

Committee Meeting

Budapest, Hungary, 5–6 April 2025

- **Hands-on industry-based application**
  - **Emphasis on manufacturing capabilities and innovation**
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### **Team Akira – IEEE UAE Section**

**Team Members:** Medwin Varghese Sajan, Mohamed Hanif Nazar, Ehshaanya Hemant Gujaran

**Affiliation:** IEEE Unit, Industry, Non-Tech Partners

**Project Focus:** Robot Building, Travel, Software Licensing

#### **Highlights:**

- **Well-articulated roadmap and logistics plan**
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### **The Punisher – IEEE Malta Section (MCAST)**

**Team Members:** Ben Farrugia, Luke Camilleri, Chris Saliba

**Affiliation:** Academic, Industry, Non-Tech Collaborators

**Project Focus:** Robot Building

#### **Highlights:**

- **Creative design elements and excellent branding**
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### **BRIS – IEEE UK & Ireland Section**

**Team Members: Ben Bartlett, Marco Moreno, Tom Dorian**

**Affiliation: Academic, Research and Industry**

**Project Focus: Robot Building, Travel, Accommodation**

### Highlights:

- **Comprehensive logistical planning**

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### Conclusion

All submissions were marked by a high standard of innovation, strategic thinking, and professional delivery. The inclusion of business plans and pitches added valuable depth to the competition, highlighting the importance of entrepreneurial competencies in today's technology-driven world.

**Congratulations to all participating teams – your ideas and efforts are a testament to the future of robotics and innovation.**





## IEEE Region 8 Robot Championships Malta 2024 – Summary of Outcomes

Link: <https://www.facebook.com/share/v/1AF1mbzPag/>

The IEEE Region 8 Robot Championships, held in Malta in 2024, brought together some of the brightest student minds in robotics and engineering from across Europe, the Middle East, and Africa. The competition showcased exceptional innovation, teamwork, and technical skill.

### Top Three Placings

- 1st Place: *Bris* – University of Limerick, IEEE UK & Ireland Section
- 2nd Place: *GSGShield* – University of Malta, IEEE Malta Section
- 3rd Place: *Akira* – IEEE UAE Section

### Special Awards

- Best Teamwork: *Leones Robotics* – University of Malta, IEEE Malta Section
- Best Looking Robot and Branding (Judges' Choice): *The Punisher* – MCAST, IEEE Malta Section
- Most Effective Add-on: *The Punisher* – MCAST, IEEE Malta Section
- Best Tactics: *Electro Warriors* – IEEE UK & Ireland Section
- Best Design: *Eitri* – IEEE Norway Section
- Best Challenger: *Akira* – IEEE UAE Section



- **Best Pushing Power: *Bris* – University of Limerick, IEEE UK & Ireland Section**
- **Best Manoeuvrability: *Bris* – University of Limerick, IEEE UK & Ireland Section**

### **Marble-Powered Programming Competition**

**Organised in collaboration with the Faculty of ICT at the University of Malta, this unique challenge using the Turing Tumble celebrated young problem-solvers:**

-  **1st Place: Isaac Aquilina**
-  **2nd Place: Matthew Bugeja**
-  **3rd Place: Evan Scerri**
-  **4th Place: George Lungaro-Mifsud**

**These students impressed the judges with their logical thinking and creativity, offering a glimpse into the next generation of innovators.**

**IEEE ROBOT CHAMPIONSHIP ORGANISATION COMMITTEE and PEA STEM Programme  
2024 – Activities Report**

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## **Executive Summary**



## Executive Summary

The IEEE PEA STEM Programme 2024 brought together diverse student branches and teams from across Europe, the Middle East, and North Africa with more than 52 activities have been submitted. 30+ were delivered impactful STEM activities across 7 countries during the last 6 months of 2024. These included robotics workshops, AI sessions, engineering expos, and hands-on demonstrations aimed at fostering interest in STEM fields among children, teens, university students, and the general public. The initiative was led by student teams and their student branches of their respective countries. These were the teams that made it to Malta for La Squadra (Tunisia), Team Akira (UAE), Mortal Kombat (UAE), University of Dubai Robotics Team (UAE), The Punishers (Malta), Leones Robotics (Malta), Eitri (Norway), Wagtech Guelek. (Tunisia), BRIS (Ireland), Electro Warriors (Ireland), GSGShield (Malta), and WKA (Saudi Arabia).

More activities were organised by those roboteers that did not manage to make it to Malta that are not documented here. There were 3 teams and more than 9 STEM activities organised in their respective countries by the teams that did not make it to Malta due to last minute issues related to VISA.

The best projects for STEM activities for this program got reimbursements for 1st, 2nd and 3rd place and 400 USD 300USD 200 USD respectively.



Highlights of the teams that participated and the final number that qualified for IEEE R8 Robot Championships in Malta 2024.

### United Arab Emirates

Team Akira held a workshop at ASPAM IIS School in Sharjah where students built OTTO robots and explored Arduino, Blockly, and 3D printing. A second workshop at MAHE Dubai introduced

university students to TurtleBot and Robot Operating System (ROS), focusing on empowering women in engineering.

Mortal Kombat hosted two sessions, one building underwater ROVs with high school students and another providing professors with EV and cybersecurity tools.

University of Dubai Robotics Team conducted hands-on activities with high school seniors and children with special needs, including Arduino-based traffic light builds and racing robot cars.

### **Tunisia**

La Squadra from ENETCOM conducted IoT and Arduino workshop series, plus community engagement events on robotics for schoolchildren, mothers, and professionals.

Wagtech Guelek. hosted robotics and Arduino events for young children and IEEE student members, introducing the Pixie robot and gamified STEM learning.

### **Malta**

The Punishers showcased robotics at Science in the City and Engineer Your Career 2024 to promote STEM to students and families.

Leones Robotics organised two large-scale public events in Valletta and Ta' Qali, featuring robotics demonstrations and STEM learning experiences.

GSGShield presented robotics at Science in the City and TechXpo with diverse hands-on activities for all age groups, including the DIY scribble bots, manipulators, and championship robots.

### **Norway**

Eitri delivered a week-long STEM learning course with 29 high school students, promoting Mechatronics as a career. A second event unveiled the Mjöltnir robot and explored welfare robotics with university students.

### **Ireland**

BRIS launched a new IEEE student branch with AI-focused panel discussions and created a new ITSS chapter through a virtual event.

Electro Warriors held two sessions at Maynooth University, one on AI image recognition for university students and another introducing pre-university students to robotics through teleoperation and STEM challenges.

### **Saudi Arabia**

WKA hosted introductory sessions on robotics and modern control engineering at KFUPM, reaching over 70 students through hands-on activities and demonstrations.

Overall Impact Total Activities: 30+ STEM activities

Audience Reach: More than 1,300 participants across all activities



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**Committee Meeting**

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Topics Covered: Robotics, IoT, Arduino, AI, ROS, Mechatronics, STEM education tools, EV tech, underwater robotics, and more

**Key Outcomes:**

Increased awareness of STEM and IEEE Robotics Championship

Enhanced technical skills in programming, electronics, AI, and robotics

Engagement of diverse audiences across continents

Inclusion of underrepresented groups including girls, children, and students from developing regions