Region 8 AdHoc Committee on New Student Contests   Lee Crudgington

Goals:

The IEEE Region 8 AdHoc Committee on New Student Contests has been tasked with identifying and developing new ideas for student contests in Region 8. The goals of the programme are as follows:

- Provide an activity for student members, which inspires learning, collaboration, the development of new skills and fosters technological innovation.

- Develop valuable experience which will enhance the job prospects of the participants, help to spread awareness of the importance of engineering skills and the positive impact that new technologies and engineers have on society.

- Enhances IEEE Student membership across Region 8 to ensure sustainability of student communities.

Progress against goals since the last report:

- **Stage 1 Finalists** – *15* teams selected for final evaluation by judge panel with valid entries.

- **Stage 2 -** *12* teams qualified to the next stage of the contest.

- **Completed Entries** – *10* completed entries received**.**

The 2021-22 iteration of the IEEEduino Student Hardware contest is nearing completion of the final judging phase. The build process, which took place in the first two months of 2022, allowed student members to nominate one week in which they are tasked with building and demonstrating their design, to showcase it to the judging panel.

The judging consists of a five-minute video which demonstrates the project and its capabilities, and allows the student to discuss the challenges of their design and how these were overcome. The submission also includes a high-resolution image of the completed project for evaluation and a copy of any Arduino code used in the design. This can make reference to the original 8-page PDF report proposal which was evaluated in the first stage of the contest.

This build process was an overwhelming success, with ten fully completed projects submitted for evaluation.

Subcommittee Specific Issues

Owing to its excellent response and reaction within the IEEE Students community, we fully plan to continue hosting the IEEEDuino contest going forward, moving out of the 'pilot scheme' and opening the contest to all interested sections. We fully anticipate significantly greater interest in the scheme and therefore changes to the processes will be required.

Discussions are ongoing as to the most effective way to implement the offer of development hardware for students to receive. It is the priority of the IEEE Region 8 leadership that we should continue to offer hardware to students for competing in this contest, and therefore we will look towards a sectional requisitioning scheme whereby the section leadership will place the order for hardware locally and be funded or reimbursed by IEEE Region 8. This will circumvent many concerns identified during this pilot programme of customs charges and delivery delays.

Points of Concern

Covid-19 related supply chain delays and the worldwide semiconductor shortage caused delays to deliveries of the development hardware to students. In addition, customs charges varied widely from the expected quotations which incurred additional costs. Plans are being drawn up to mitigate this situation in any future iteration of the contest.

Proposals for improvements/Other Issues to report

Greater awareness and support from section chairs and/or section student activities representatives, in order to raise the profile of this contest in future.