

## Bios of 2023 Junior and Senior RoboArts Judges Competition Chair: David Carbery May 13, 2023

Farah Alhourani is the CFO/owner of STEAM Center, M.Sc. Physics. She is an expert in introducing STEAM education to both national and international schools for kids, adults, university students and even teachers regardless of their educational backgrounds. Farah specializes in creating and designing academic content among the field of AI, science, and ICT training. She manages teams based on their financial and coaching aspects and establishes academic and management plans for projects, events, and exhibitions with outstanding, smart ideas aiming to empower students, teachers towards integrating technology and art into their educational systems. Farah is excited to discover new methodologies in the world of robotics, seeking to take STEAM education to the next level and striving to make the STEAM Center the lynch pin in STEAM strategy. Finally, she is a certified robotics judge from the Arab Robotics association since 2014, she has participated in all Robotics competitions held annually locally and in the Arab region.

**Dr. Chris Cartwright** is the Robofest Director and an Associate Professor of Mathematics at Lawrence Technological University. Dr. Cartwright received his PhD in Applied Mathematics and Computational Sciences from the University of Iowa in 2003. His PhD thesis involved using parallel programming techniques with the Message Passing Interface (MPI) to solve computational geometry problems related to meshfree methods for solving Partial Differential Equations. He also holds a BA in Mathematics and a BA in Music from Kalamazoo College. He is interested in outreach to K-12 students to encourage them to pursue careers in STEM (Science, Technology, Engineering, and Mathematics). He has been actively involved in Robofest, LTU's autonomous robotics competition, since 2010.

Manal Osman Nagash received her Bachelor of Science Degree in Special Education - Gifted track. Excellent with Honor. Certifies TOT. Certified Robotics Trainer. Conduct workshops to bridge the gap between general and special education within the teaching and parental community since 2006. Created and manage the Artificial Intelligence Program, which includes preparing for robotics national and international tournaments. Represented Kingdom of Saudi Arabia in China 2009, Taiwan 2010, and awarded 3rd place in 2013 and 1st place research award on 2018 in Arab robotics championship. Best coach award 2018.