

ROBOFEST Michigan Championship

Bios of Exhibition Judges (As of May 9)

Lawrence Technological University

May 13, 2017

Katherine Bis Katie received her B.S. in Mechanical Engineering and her B.A. in Child Psychology from the University of Michigan. She worked for 15 years at Lionel Trains as a manufacturing engineer, design engineer and then as an Engineering Program Manager. She is currently teaching AP Statistics and Algebra 2 at Country Day Upper School. She also is self-employed as an Educational Consultant and has developed a tutoring program for STEM subjects and Academic test prep. She has been actively involved in coaching and coordinating FLL, Robofest, Science Olympiad, and/or WRO teams for the past 8 years and has recently traveled to Russia (2014), Qatar (2015), and India (2016) with her son's WRO World Championship qualifying teams. She is a current Robofest coordinator with various responsibilities including administrative tasks, training responsibilities, and Exhibition Chief Judge.

Jakob Culebro received his B.Eng. in Mechatronics from Universidad Nacional Autonoma de Mexico (UNAM) in 2015. As an undergraduate, he had the opportunity to work in various funded robotics projects, participated at the RoboCup in 2014 in Brazil with a search and rescue robot, and is most fond of a spherical robot built as part of his dissertation. Afterwards he joined Continental Automotive R&D in Guadalajara, Mexico, working in the development of algorithms for autonomous vehicles. His main interests are robotics, the promise of AI and machine learning techniques, and probabilistic methods for information retrieval. His previous work and very brief involvement in research focused in Lagrangian modelling and control, with a heavy emphasis on the software implementation of robotics systems.

Yawen Li, PhD Yawen is an associate professor in the biomedical engineering department at Lawrence Technological University. She received her PhD from MIT in materials science and engineering. She also completed her postdoctoral training in the Center for Engineering in Medicine affiliated with both the Massachusetts General Hospital and Harvard Medical School. Her main research interests are in materials processing, microelectromechanical systems (MEMS) for biomedical applications and tissue engineering. Besides teaching and research, she is currently coaching a robotics team of 6 elementary students.

Jasmine Lauch is pursuing a B.S. in Elementary Education concentrated on Mathematics at Madonna University. She will be student teaching at Plymouth Christian Academy in the fall. She is currently working as the Family Ministry Intern at Harvest Bible Church. She has years of experience working with children in and out of the classroom setting including youth outreach programs and weekly teaching opportunities at her church. She is interested in researching and furthering her understanding of technological advances that can promote critical thinking and growth among students within her classroom. She is proficient in teaching and tutoring STEM topics as well as arts and humanities. During her studies she has participated in several volunteer opportunities to promote the use of technology among students within the community.

Thassyo Pinto received his B.S. in Mechatronics Engineering from Universidade Salvador (UNIFACS) in Brazil. As an undergraduate student, he had the opportunity to work as a volunteer in different professional organizations, participating and organizing seminars, workshops and competitions, promoting technology awareness. He has experience in automotive industry, working as a Vehicle Package analyst, and as a VEV Sign-off engineer at Ford Motor Company. He is now a Ph.D. student in Electrical Engineering at Michigan State University, and a member of the Smart Microsystems Lab. His research interests are in soft robotics, evolutionary robotics and biorobotics. He is also active member and volunteer of the IEEE Robotics and Automation Society (RAS) and the Regional Student Representative (RSR) for Regions 1 to 7.

Lior Shamir, PhD Associate Professor of computer science and assistant dean for research at Lawrence Technological University. Specializes in artificial intelligence (AI), pattern recognition, and data science, he directed numerous government-funded research projects related to computational intelligence, and developed novel AI methodology for machine perception of complex human-created data such as art and music. His methodology and research has led to

numerous data-enabled discoveries in fields such as astronomy, cosmology, medicine, biology, zoology, and more. He is primary author of over 100 peer-reviewed scientific papers, and his research has been noted by public figures such as Ray Kurzweil and Richard Dawkins. His work has been featured on the mainstream media such as NBC, CBS, Fox, Scientific American, Discovery, NPR, Wired Magazine and more, and he is frequently interviewed by the premier international popular press on topics related to machine perception.

Mirit Shamir Graduated of Radzyner Law School and Arison School of Business School in 1999, and earned a Master degree in law (LL.M) from Tel-Aviv University in 2003. In 2006 graduated from Michigan Technological University with M.S. in Environmental Policy. Recipient of NSF IGERT (Integrative Graduate Education and Research Traineeship for Sustainable Future) scholar award. Admitted to practice law in Israel in 2000, and actively practiced law as a profession for few years, focused on commercial, labor and environmental law. Since 2010 has taught in the Humanities, Social Science and Communication department at Lawrence Technological University. Also teaches leadership at Lawrence Technological University.

Vamshi Thatipally I am currently pursuing Masters in Electrical and Computer Engineering at Lawrence Technological University. I am also working on the generation of electricity using Sterling Engine as an Electrical Engineer at Sefton Motors. I also worked on LTU Formula Hybrid team for 8 months which gave me hands on experience with the Hybrid vehicle. I just love building electronics (Myself I call it as “Electronics of things”) and also I have a great passionate to work on Electronics, which is giving me the inspiration to do many independent projects using embedded systems, VLSI and Nano- Electronics. I am also the secretary of IEEE LTU student chapter since Jan 2016 until present. I also participated in many workshops including “ROBO-FIGHTS” at my bachelor’s.

Javier Alcazar, Ph.D. Alcazar received a Ph.D. in robotics and controls from Cornell University. Afterwards he joined General Motors R&D to work 7+ years in vehicle dynamics and manufacturing system research laboratories. He worked on autonomous grasping technics, Human modeling and Human Robot Interaction with Robonaut 2. He moved on to work for Honda R&D of Americas Inc. as part of the Intelligent Transportation Systems department. His research focused on Connected and Autonomous vehicles and Automated Highway systems. He is now at Continental Automotive R&D working on the first generation of autonomous driving. Dr. Alcazar is also the IEEE Chair of Robotics and Automation Societies in Southeast Michigan.

Queen Umeana Graduated with a B.S. degree in Geological Earth Sciences and M.S. in Civil Engineering with emphasis in GIS from the University of Colorado at Denver. She has been interested in GIS, engineering design and in robotics to encourage STEM oriented learning in youth. She is one of the 2017 IMAGINE (Geospatial) Graduate student paper presentation winners. She has coached/mentored/Judged for the Michigan mathematics competition. She taught at the University of Science and Technology in Beijing, China. She has volunteered for many years with programs focused on increasing the number of minorities entering STEM fields. Her interest is to develop a charter school that increases STEM attitudes, knowledge, skills and workforce capacity in the use of robotics and geospatial technologies as an informative platform for middle school students. She is now a Ph.D. student in Technology / Engineering Management with emphasis in GIS at Eastern Michigan University, Ypsilanti, MI and a member of the National Association of Black Engineers. Her research interest focuses on STEM Curricula in middle school with GIS/Engineering in science classrooms.

Dr. Sibrina N. Collins is an inorganic chemist that has significant experience focused on undergraduate STEM (Science, Technology, Engineering & Mathematics) education, mentoring, community engagement and diversity in STEM initiatives. She earned a B.A. in chemistry (*cum laude*) from Wayne State University (Detroit, Michigan) in 1994. Dr. Collins pursued graduate studies in the Department of Chemistry at The Ohio State University, earning a M.S. (1996) and Ph.D. (2000), in the field of inorganic chemistry. In her role as the Founding Director of the LTU’s Marburger STEM Center, she is responsible for the coordination and leadership of STEM programming initiatives, which includes the Blue Devil Scholars Program (BDSP), an innovative partnership with the Detroit Public Schools Community District (DPSCD) to enhance the STEAM curriculum in DPSCD institutions. Most recently, her synergistic activities include serving as a mentor for a Detroit middle school team that participated in the 2017 Future City Competition, hosted by the Engineering Society of Detroit. The team received the 2017 Technological Innovation Award for their efforts. In addition, Dr. Collins served as a STEM career panelist for a Microsoft tech engagement event for 75 Detroit middle school girls entitled, *Launch, Learn & Code: Girls Empowered!* The students participated in one-hour code sessions, TED talks, a STEM career panel and a screening of the movie, *Hidden Figures*.