

# Minnesota Federation of Engineering, Science, and Technology Societies (MFESTS)



## 2020 Annual Report

This report describes the activities of MFESTS from January 1, 2020 through the first BOD meeting in Q121 (3/9/2021). We have three mission elements:

To provide service to young people in hopes of helping them learn more about potential STEM careers. See Outreach.

To provide professional development services to professionals in engineering-related careers. See Partnerships/Membership.

To provide service to member societies (BOD). See Partnerships, Awards, Member Engagement, and Scholarships.

### Outreach

- As a Bronze Sponsor for the 21<sup>st</sup> Annual (1st Virtual) Minnesota Future Cities Regional Competition, the MFESTS “Engineering Excellence” Special Award (since 2004) had volunteers judge three teams that applied for this award out of 19 teams that participated. The award is given to the team that best integrates the use of many different engineering disciplines, uses creative and practical engineering solutions and plans for future growth.
- This year’s award went to **Justice Page Middle School, Minneapolis** for their city of **Civitas Stellas**. Gift bags were provided to the team. The three judges included AIAA society with two members (Andrew Carlson and Caleb Carlson) and MFESTS President Cathy Krier (MFESTS/SWE). <https://www.youtube.com/watch?v=E3sVBMONPxA>
- Made financial contributions to the Math Counts Program
- Partnership with active partner - Minnesota State Center of Excellence, Jason Burns - heading up free virtual STEM activities related to automation, robotics, and manufacturing (think Megatron) introducing real world, problem solving, project based learning experiences to children K-12. This organization is advancing Minnesota’s engineering innovation and competitiveness by enhancing education through enhanced curricula for high school students, engaging industry through workforce partnerships (+member societies like ISA) and inspiring students through K-12 on-line learning resources. The Machine Design competition attracts equal male to female participation.
- Engaging in a new venue orchestrated by Engineering Alliance, STEM Meets the Challenge of the Pandemic. The primary goal of this programming is to highlight the many ways STEM professionals and their companies are using science and engineering to find innovative and cutting-edge solutions to the new challenges introduced by the pandemic. In this way, program audiences will increase their understanding of: how innovation, problem solving, teamwork, and creativity are used to meet community needs; the wide variety of STEM careers that can play a role in addressing pandemic-scale problems; and the interesting work being done by many Minnesota businesses and organizations and the variety of STEM-related career opportunities that exist in our state.

### Partnerships: BOD Meetings & Cross-Society Joint Interaction

- Three quarterly Board of Directors Meetings and four Executive Committee meetings were held. Due to the pandemic, all meetings were held via Zoom. All individuals that participated provided positive feedback that this virtual format was a good way to practice virtual meeting skills and connect given the pandemic circumstance.
- Several cross-society events are/were posted on the [www.MFESTS.org](http://www.MFESTS.org) website calendar. The web page has been a consistent source of event information for 19 member society meetings throughout the year.

## **Membership**

One affiliate society (MnCOE - Engineering) and 18 member societies were active in MFESTS this year. BOD engagement shifted to a virtual format due to the pandemic.

CAISS-MN was not active. Based on input from MFESTS Rep (Gary Jing), this is no longer an organized society in MN. We will remove this organization from the MFESTS Medallion, wish the best to Gary and intend to encourage his engagement in MFESTS through his affiliation with other member societies!

ASME was not active. This society's last activity was in 2018 (with 109 professional MN members). This is an organization with a lot of collegiate activity in the state. MFESTS EC members will focus on membership outreach/re-engagement conversations in 2021.

## **Awards and Recognition - Member Society Awardees**

The following MFESTS awards were reviewed by other member society representatives and Awardees were recognized at the BOD #3 meeting as well as on the on the [www.MFESTS.org](http://www.MFESTS.org) website. Due to the pandemic, the recognition was captured in video and shared via website and social media channels.

- Two MFESTS Charles W. Britzius Distinguished Engineer Awards:

<b>Awardees</b>	<b>Nominating Society</b>
Thomas Eggum	American Society of Civil Engineers (ASCE)
Venkat Parameshwaran	Society of Automotive Engineers (SAE)

- One MFESTS Richard Alberg Distinguished Science and Technology Professional Awards:

<b>Awardees</b>	<b>Nominating Society</b>
Charles Leidtke	MN American Society for Quality (ASQ)

- The Minnesota Young Engineer of the Year was awarded to Jimmy Bennett nominated by the American Society of Civil Engineers

<b>Nominee</b>	<b>Nominating Society</b>
Jimmy Bennett	American Society of Civil Engineers (ASCE)

- No nominations were received for the MFESTS Young Science and Technology Professional Award.

## **Member Engagement**

The MFESTS EC focused on website enhancements and event coordination activities by engaging graduate student volunteers to stay connected throughout the pandemic this year.

## **MFESTS Website**

The MFESTS website, [www.MFESTS.org](http://www.MFESTS.org) has received a high order of attention from MFESTS past president, Antonio Sacin (SHPE). His work resulted in search engine optimization without website and up to date calendar listings and promotions of society events. The work was supported by the set of event coordinators, filled by way of the new Graduate Student engagement strategy.

## **MFESTS Social Media**

The MFESTS Facebook, <https://www.facebook.com/#!/MinnesotaFESTS> continues to be staffed by a past MFESTS present, Holly Kimball (SWE). Thank you Holly!

## **Graduate Student Engagement**

Two event coordinator positions were created based on feedback from the member societies requesting help with event advertising. The event c/coordination on MFESTS website. The coordination role has been well received by all members. The two initial volunteers were graduate students at SCSU and has expanded to three volunteers (2 graduate students and 1 stay-at-home parent planning to reenter the workforce soon).

## **Scholarship**

Based on 2020 BOD Budget approval, two MFESTS Scholarships were awarded.

Purpose of MFESTS Scholarship: To provide financial assistance and promotion of science/engineering graduate students for exemplary voluntarism and community support (blazing a trail for others to follow) supporting the MFESTS organization and member societies.

2020 Awardees are Rajitha Kilaru and Rishu Rathee (blazed new trails of MFESTS event coordination during the pandemic) information has been provided to the web-master (Antonio Sacin) to recognize these two individuals on the MFESTS website.

## **Current Officers**

Elections took place in Dec 2019 and the following officers accepted their posts starting in Jan 2020. They will continue in these posts through Dec 2021. The Secretary (Lauren) joined us in Oct 2020.

<b>MFESTS Executive Committee 2020-2021</b>		
<b>Office</b>	<b>Name</b>	<b>Society</b>
President	Cathy Krier	SWE
1 <sup>st</sup> Vice President	Venkat Parameshwaran	INCOSE /SAE
2 <sup>nd</sup> Vice President	Gregg Robinson	SME
3 <sup>rd</sup> Vice President	Aaron Cruz	SHPE
Treasurer	Marcos Guzman	SHPE
Secretary	Lauren J. Morgan-Evans	NSBE

Respectfully Submitted by the 2020-2021 MFESTS President,  
Cathy Krier (SWE)