

All times are MT

Presentation Sessions

Thu 4/23/2020

8:30-8:45

Welcome Talk by Dean Christos Christodoulou

ZOOM link 1

Thu 4/23/2020

1st AM Session	Authors	Paper/Presentation Title
9:00-9:12	Vanessa Svihla, Yan Chen, Chen Qiu, Jordan O. James, Amber Gallup and S. Pil Kang	Tools for measuring design problem framing progress
9:12-9:24	Andrea Turcatti and Terrell Bennett	The Effectiveness of Service-Learning Based Projects in Improving the Understanding of the Design Process and the Self-Efficacy of Students in Engineering
9:24-9:36	Alex Nunez-Thompson and Matthew Wettergreen	Implementing Authentic, University-Level Engineering Design Coursework in Pre-College Programs
9:36-9:48	David Ewing	The Effects of Specialized Section Groupings on Success Rates in a Freshman Problem Solving Course
9:48-10:00	Tracy L. Mallette, Madalyn Wilson-Fetrow, Jordan O. James, Vanessa Svihla and Abhaya Datye	Bench-scale Testing Enhances Focus on Feasibility of Design Solutions
10:00-10:12	Roman Taraban, Curtis Craig, Srinivasa Murthy Gunturu and Edward E. Anderson	Machine Analysis of Differences in Statics Problem-Solving Concepts Based on Skill Level

2nd AM Session	Authors	Paper/Presentation Title
10:20-10:32	Ahmed Hussain, Nizar Tayem, Jamal Nayfeh and Samir El-Nakla	Undergraduate Engineering Program Evaluation, Assessment, and Continuous Improvement Process: A Case Study
10:32-10:44	Amir Karimi and Randall Manteufel	Most Recent Updates to ABET-EAC-Criteria 3, 4 and 5
10:44-10:56	Pasha Hammond and Huda Sarraj	Introducing iCM: Leveraging Tableau for Curriculum Mapping

10:56-11:08	Andrei Zagrai, Donghyeon Ryu, Mostafa Hassanalian, Sayavur Bakhtiyarov and Arash Mousavi	Micro Modules for Reshaping Mechanical Engineering Curriculum
11:08-11:20	Krista Nicklaus, Daniel Puperi and Patricia Clayton	Perspectives on a Mentored Engineering Graduate Student Teaching Practicum for Faculty Teaching Preparation
11:20-11:32	Amir Karimi	Instructor Initiated Drop Policy Effect on Student Success

11:40pm - 12:00pm      Plenary Presentation      Engineering Education into the Future: What it could look like and the learning spaces needed to support it      ZOOM link 2  
by P.K. Imbrie

Thu 4/23/2020

1st PM session	Authors	Paper/Presentation Title
12:10-12:22	Julie Ford, Robinson Ford, Dominic Gallegos and Casper Huang	Engineering Outreach: Socorro Middle Schoolers and New Mexico Tech Students Design, Build, and Race Gravity-Powered Cars
12:22-12:34	Abhaya Datye, Jamie Gomez, Marina Miletic, Eva Y. Chi, Sang M. Han, Catherine Anne Hubka, Yan Chen Chen, Vanessa Svihla and Sung Pil Kang	Design Challenges as a Spine to Engineering Courses
12:34-12:46	Roy Issa and Reinhard Puffing	Design of a Hexadrone for Agricultural Spraying - A Collaboration Project between West Texas A&M University and FH JOANNEUM
12:46-12:58	Veronica Mitchell, Benjamin Matheson, Tye Martin, Phuong Nguyen, Vanessa Svihla, Eva Chi and Heather Canavan	Diverse by Design: Increasing the Representation of People with Disabilities in STEM through Community Engagement
12:58-1:10	Ahmed Hasan and Tariq Khraishi	"An Introduction to Modern Mechanical Engineering" A New Course to Introduce Students to the Dynamic and Evolving Mechanical Engineering Disciplines.
1:10-1:22	Matthew Wettergreen	Helping Students Gain Momentum in Prototyping When Transitioning from Low to Medium Fidelity Prototypes

2nd PM session	Authors	Paper/Presentation Title
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1:42-1:54	Antonio Garcia, Marcus McClary, Patricia Sullivan, Sandra Way, Edward Pines, Steven Stochaj, Gabe Garcia and Catherine Brewer	Andragogy and Pedagogy Curriculum Planning to Help 1st Generation, Low Income Students Succeed in Engineering
1:54-2:06	Kristine Denman, Joel Robinson and Tariq Khraishi	A Study of the Impact of a NSF Internship and Conference Participation Program on Student Success
2:06-2:18	Martha Mitchell and Paola Bandini	Development of a one-on-one mentoring model for undergraduate students at a Minority Serving Institution
2:18-2:30	Madalyn Wilson-Fetrow, Dayra Fallad-Mendoza, Benjamin Fetrow, Christopher Fetrow and Vanessa Svihla	What I Wish My PI Knew: Authentic Mentorships for Success in Undergraduate Research
2:30-2:42	Olga Lavrova and Satish Ranade	Student Recruitment, Retention and Employment Placement for Future Power Systems Workforce Development at New Mexico State University.

ZOOM link 3

3rd PM session	Authors	Paper/Presentation Title
2:50-3:02	Maryamsadat Shokrehodaie, Annatoma Arif and Robert Christopher Roberts	Optimizing Laboratory Curriculum to Enhance Students' Learning Efficiency in Electrical Engineering Department
3:02-3:14	Kenneth Leitch and Erick Butler	Collaboration between a civil engineering and environmental engineering program: better together
3:14-3:26	Andrew Grossfield	A Comparison of Differential Calculus and Differential Geometry in Two Dimensions
3:26-3:38	Ulan Dakeev, Recayi Pecen, Faruk Yildiz and Ali Aljaroudi	A novel Augmented Reality application for a Mobile Renewable Trailer as an Emergency Response
3:38-3:50	Jalal Rastegary, Patricia Sullivan, Stephanie Lloyd, Jason Dana, Catrina Damrell and Peter Cooke	Efficient Operation of Independent Grocery Stores in New Mexico
3:50-4:02	Matthias Pleil	Foundations in Microsystems Fabrication Course for Engineering Students
4:02-4:14	Aleksandr Sergeyeve, John Irwin and Adrienne Minerick	Pioneering Approach for Offering the Convergence MS Degree in Mechatronics and Associate Graduate Certificate

Fri 4/24/2020

1st AM Session	Authors	Paper/Presentation Title
9:44-9:56	Julia N. Savoy, Mia K. Markey and H. Grady Rylander III	Enhancing Predoctoral Biomedical Engineering Ethics Education
9:56-10:08	Matthew Alexander	Teaching professional skills in chemical engineering courses - critical thinking, creativity, communication, and collaboration skills
10:08-10:20	Marina Miletic, Vanessa Svihla, Eva Chi, Jamie Gomez, Abhaya Datye, Pil Kang, Yan Chen and Sang Han	The design of digital badges to certify professional skills in engineering
10:20-10:32	Elsa Castillo, Joel Robinson, Kristine Denman, Anyssa Choy and Tariq Khraishi	Results of a Scholarship Program on Engineering/Computer Science Undergraduate Students Success
10:32-10:44	Diana de la Rosa-Pohl and Catherine Horn	Endeavour S-STEM: Supporting High-Achieving Underserved Students in STEM
10:44-10:56	Cody Crosby, Anita Patrick, Margo Cousins, Laura Suggs and Mia Markey	Scientific Skill Acquisition and Identity of Visiting Scholars in a Research Experience for Undergraduates (REU) Site
10:56-11:08	Tamara Stimatze, Jacqueline Zeiber, Patricia Sullivan, Steven Stochaj and Luis Vázquez	New Mexico PREP Academy: Improve STEM Knowledge for Underrepresented Middle and High School Students
11:08-11:20	Kenneth Van Treuren	Helping iGen Engineering Students Prepare for the Real World

ZOOM link 4

2nd AM session	Authors	Paper/Presentation Title
11:30-11:42	Jacqueline El-Sayed	Emergency Response: Shared Best Practices
11:42-11:54	Yu-Lin Shen	Meeting the Standards for Online Teaching: Some Strategies for "Dry" Engineering Courses
11:54-12:06	Jeff Cunion and Brigitte Barbier	Integrating SAP into an Online Engineering Technology Class: Issues and Outcomes
12:06-12:18	Chadia Affane Aji and M. Javed Khan	Simulation Technology and Student Engagement
12:18-12:30	Cynthia Fry and Zachary Steudel	DEVELOPMENT OF A REVERSE SOFTWARE ENGINEERING PROJECT

ZOOM link 5  
Plenary  
Presentation

12:30-12:42	Cynthia Fry, Gennie Mansi and Kevin Kulda	A SOPHOMORE-LEVEL REVERSE SOFTWARE ENGINEERING PROJECT IN COMPUTER SYSTEMS
12:42-12:54	Roli Varma	Indian Perspective on Women in Computing
12:54-1:06	Randall Manteufel and Amir Karimi	Use of phones and online tutors to cheat on engineering exams
1:06-1:18	Roli Varma and Meghna Sabharwal	Asian Indian Engineers on H-1B Visas in the United States

1st PM session	Authors	Paper/Presentation Title
1:50-2:02	Chadia Affane Aji and M. Javed Khan	Effective Instructional Strategies for Deeper Learning
2:02-2:14	Ryan Campbell, Danny Reible, Roman Taraban and Jeong-Hee Kim	More than a Dream: The Developing Reflective Engineers through Artful Methods (DREAM) Project
2:14-2:26	Julia N. Savoy, Mia K. Markey and H. Grady Rylander III	Using Reflective Tools to Enhance the Value of Externships for Predoctoral Biomedical Engineering Students
2:26-2:38	Vanessa Svihla	Making Ideation Authentic and Useful in Course-Based Design
2:38-2:50	Jamie Gomez, Catherine Hubka, Yan Chen, Vanessa Svihla, Eva Chi and Abhaya Datye	Do I have to teach writing?
2nd PM session	Authors	Paper/Presentation Title
2:50-3:02	Yan Chen, Marina Miletic, Sang M. Han and Vanessa Svihla	Enhancing student learning with a community-based design challenge in a transport course
3:02-3:14	Sheima Khatib, Roman Taraban and William Lawson	Changes in Student Confidence, Strategies, and Reflection in a FE Review Course in Chemical Engineering
3:14-3:26	M. Javed Khan and Chadia Affane Aji	Development of Engineering Identity
3:26-3:38	John Carrell, Joshua Cruz and Stephanie Kuzmack	Using Humanities as Context for STEM Empathy Development: A Discourse Analysis

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