



 May 4th-5th, 2020

 Utah Valley University, Orem, UT, USA

Intermountain Engineering, Technology and Computing (i-ETC) Conference provides a forum for interaction among students, faculty, and industry employers. As contributors in the technology fields of engineering, technology, and computing, we join together to present research, product technology demonstrations, and advances in education.

Attendees will learn about current research and industry best practices for digital product development, design testing, deployment, and operation.

i-ETC is supported by Utah Valley University (UVU), Brigham Young University (BYU), University of Utah, Utah State University, and a number of Utah's tech Industries along the Silicon Slopes.

#### Conference Chair

Mohammad A.S. Masoum (UVU) • MMasoum@uvu.edu

#### Conference Secretariat

ietc@uvu.edu

#### Advisory Chair

Kazem Sohraby (UVU) • KSohraby@uvu.edu

## Call for Papers

Prospective authors from universities, research institutions, government agencies and industry are invited to submit a full paper electronically (<http://i-etc.org>) with a maximum number of six A4 size pages.

A "doc" format template for the final paper can be downloaded from the IEEE.org website. All papers will be peer reviewed by at least three independent reviewers.

All papers that are accepted and presented at i-ETC 2020 will be published in the conference proceedings. Those papers related to electrical engineering or electronics will be posted in IEEE Xplore.x

#### Panel Sessions and Tutorials

Prospective organizers of special sessions, panel sessions, and tutorials are invited to submit their proposals by Feb. 25, 2020, to Chair Reza Sanati • Sanatire@uvu.edu

#### Authors' Deadlines

Papers Due <b>DEC 31 2019</b>	Notification of Acceptance <b>FEB 29 2020</b>	Early Bird Registration <b>MAR 31 2020</b>
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## Registration

<b>One-Day</b> <b>\$150</b> 3/31/20 Industry Participants	<b>Student</b> <b>\$150</b> 3/31/20 Early Bird Registration	<b>Participant</b> <b>\$300</b> 3/31/20 Early Bird Registration
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The full registration fee is \$350 per participant (\$300 early), and \$200 per full-time student participant (\$150 early). One-day conference registration is available for industry participants at \$150.

Full registration includes a copy of the proceedings, conference bag, lunches, and morning/afternoon tea.

#### Accommodation

A limited number of rooms are available at the Hampton Inn & Suites, Orem, at reduced conference rates.

#### Student Travel Support

A number of partial travel grants are available to full time students to attend/present a paper at i-ETC 2020.

## ENGINEERING TRACK

### ▲ Energy Systems

Smart Grid; Power Systems Operation and Planning; Sustainable and Renewable Energy Systems; Power Electronics; Electromechanical Energy Conversion and Storage; Energy Consumption Modeling and Optimization; Energy and Environmental Engineering.

### ▲ Control Systems

Smart Manufacturing and Automation Systems; Intelligent Robot Systems; Artificial Intelligence; Machine Learning and Neural Networks; Sustainable Manufacturing; Manufacturing Process Monitoring and Control.

### ▲ Communication and Computer Engineering

Smart Computer Networks and Communication; Mobile and Wireless Networks; Embedded Systems; Wireless Sensor Networks and Applications; Signal Processing; Image Processing and Vision.

### ▲ Electronics and Circuits

Smart Circuits and Systems; VLSI Design; Nanomaterials and Nanotechnology; Optical Communication.

### ▲ Mechanical Engineering

Heat Transfer; Fluid Mechanics; Thermodynamics; Mechanisms and Robotics; Mechanical Design; Mechanics and Mechatronics.

### ▲ Material Science and Engineering

Smart Materials; Innovative Engineering Materials; Materials Design and Applications; Composite Materials Science and Technology; Nanomaterials; Materials and Manufacturing Engineering.

### ▲ Civil and Construction Engineering

Unique Design or Construction Case Studies; Construction Innovations; Instrumentation and Remote Sensing; Geographic Information Systems; Building Information Modeling; New Construction Materials; Sustainable Solutions and Practices

### ▲ Capstone Projects and Undergraduate Research in Engineering

## TECHNOLOGY TRACK

### ▲ Automotive

Diesel Systems; Automotive Technology; Collision Repair; Power Sport, Street Rod; Vehicle Electrification.

### ▲ Technology Design

Architecture; Drafting; Surveying and Mapping, 3D Printing and Prototyping; UX Digital Product Design; Civil Engineering; Web & Digital Platforms; Human Centered Design; Mobile App; Accident Reconstruction.

### ▲ Digital Media

Digital Animation; Game Development, Digital Cinema Production; Cinematography, Directing; Post-Production; Digital Photography; 360° Photography and Video; Digital Audio; Music Editing and Production; Audio Restoration; Digital Archiving; Digital Publishing.

### ▲ Mixed Reality

Augmented Reality; Virtual Reality; Hybrid Reality; Mixed Reality Visual and Audio; MR Simulations; 3D Modeling; Training Simulations.

### ▲ Automation

Home Automation; VX Voice Experience Design & Development; Interface and Experience Design; Drone Surveying and Automation.

### ▲ Information Technology

Networking and Data Communications; Cybersecurity; Network Administration and Security; Virtualization; Automated Testing and Monitoring; Computer Forensics and Security; Healthcare Information Systems.

### ▲ Management

Project Management; Product Management; Facilities Management; Entrepreneurship; Training and Education; Business Intelligence Systems; Business and Marketing Education.

### ▲ Capstone Projects and Undergraduate Research in Technology

## COMPUTING TRACK

### ▲ Computing Trends

Database Systems; UX and Visualization; e-Business, e-Learning and e-Government; Modeling and Simulation; Data Science; Computing Education and Recruitment; Computing Frontiers.

### ▲ Software Engineering

Software Design and Design Patterns; Software Reliability, Safety and Security Methods; Software Engineering Methodologies; Software Testing; Evaluation and Analysis Technologies.

### ▲ Medicine & Healthcare

Bioinformatics; Health Informatics; Biomedical Engineering and Sciences; Medical Image Processing and Object Recognition.

### ▲ Intelligent Systems

Artificial Intelligence; Machine Learning and Deep Learning; Cognitive Computing; Information and Knowledge Engineering; Data Mining; Computer Vision and Pattern Recognition.

### ▲ Security

Privacy; Internet Security; Cryptography; Secure Storage and Transactions.

### ▲ Communication

Parallel and Distributed Computing; Internet of Things; Wireless/Mobile Communication; Cloud Computing.

### ▲ Capstone Projects and Undergraduate Research in Computer Science