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IEEE SMC
Systems, Man, and Cybernetics Society

2022 IEEE International Conference on Human-Machine Systems (ICHMS)

Conference Program

November 17-19, 2022

Orlando, Florida, USA

UF Research and Academic Center (UFRAC)

Hosted by the University of Florida (UF),
Herbert Wertheim College of Engineering,
Department of Industrial & Systems Engineering (ISE)

ISE
INDUSTRIAL & SYSTEMS ENGINEERING
UNIVERSITY OF FLORIDA

The **2022 IEEE International Conference on Human-Machine Systems (ICHMS)** will be held in Orlando, Florida as a hybrid event, allowing for both physical and virtual attendance. The conference theme is **Human-Autonomy Teaming**.

This ICHMS will provide an opportunity for the academic, governmental and industrial communities to address new challenges, share solutions, and discuss future research directions in the important area of Human-Autonomy Teaming. The meeting will specifically cover contributions on research related to *integrated human/autonomy systems* at multiple scales and includes areas such as *cognitive engineering of autonomous agents; design for human and autonomy interaction; technological aids for human-autonomy interaction; human-autonomy interaction modeling, testing, and evaluation; and fundamental issues of measurement and modeling of human-autonomy performance in engineered systems*. The organization of ICHMS will include: Regular Sessions, Special Sessions, and at least one session focused on Ph.D. student research.

The conference will also feature plenary speeches, panel sessions, tutorials, and poster sessions. Contributions are expected from academia, industry, and management agencies. All accepted papers will be published in conference proceedings and in IEEE Xplore.

HYBRID CONFERENCE

Due to the persistence of the pandemic conditions, for the time being, the 3rd ICHMS is planned as a hybrid conference with physical and online attendance. Physical attendance will include a social program to support networking and future collaborations. The online component will support sharing of creative and inspiring research as well as Q&A sessions across the globe.

Location & Host

Orlando lies in the heart of central Florida and is one of the most visited cities in the world for theme parks and access to beaches and the Atlantic Ocean.

Orlando, Florida is a city for tourism, high-tech industry, State and private academic institutions, and vibrant cultures. Orlando is one of the fastest-growing cities in Florida and is home to Disney World, Universal Studios, SeaWorld and other large theme parks, Orlando's economy is supported by the presence of major corporations, including AMD, Duke Energy, Lockheed Martin, Siemens and others. Orlando is also home to the University of Central Florida and exclusive private institutions, such as Rollins College. As a result of an attractive location and industry base, Orlando has an international culture with excellent restaurant and events, including professional sports and amusements

University of FLORIDA (UF)

As the host institution, UF is the preeminent institution in the State of Florida University System. UF is a top-5 public institution (according to USNWR) and had a research expenditure level of ~$960M for 2021. The main campus has over 800 majors across numerous named colleges and schools, including the Herbert Wertheim College of Engineering, the Levin School of Law, and the Warrington College of Business Administration. UF's presence in the Orlando area includes UF Research and Academic Center (UFRAC) at Lake Nona. The ICHMS will held at this contemporary academic facility located in Orlando's new "Medical City". The UFRAC has numerous conference-style auditoriums and workshop rooms to accommodate all meeting sessions as well as reception spaces.

Main Conference Schedule At-A-Glance

ICHMS Main Conference			
Day 1 11/17/22	4:00PM-5:30PM	On-site Registration	1st Floor Lobby
	5:30PM-6:15PM	1ST Keynote Speaker: Jaime Ruiz	Auditorium 133
	6:15PM-6:30PM	Break & Travel to Downtown Lake Nona	
	6:30PM-8:30PM	Conference Reception	Chroma Modern Bar & Kitchen
Day 2 11/18/22	8:15AM-9:30PM	1ST Technical Session	Auditorium 133
	9:30AM-9:45AM	Break	3RD Floor Lobby & Outdoor Patio
	9:45AM-11:00AM	2ND Technical Session	Auditorium 133
	11:00AM-11:15AM	Break	3RD Floor Lobby & Outdoor Patio
	11:15AM-12:00PM	2ND Keynote Speaker: Jing (Eric) Du	Auditorium 133
	12:00PM-1:30PM	Lunch	3RD Floor Lobby & Outdoor Patio
	1:30PM-2:45PM	3RD Technical Session	Auditorium 133
	2:45PM-3:00PM	Break	3RD Floor Lobby & Outdoor Patio
	3:00PM-4:15PM	4TH Technical Session	Auditorium 133
	3:00PM-5:45PM	Poster Session	3RD Floor Lobby
	4:15PM-4:30PM	Break	3RD Floor Lobby & Outdoor Patio
	4:30PM-5:45PM	5TH Technical Session	Auditorium 133
	5:45PM-6:30PM	Break & Travel to Downtown Lake Nona	
	6:30PM-8:30PM	Conference Dinner Social	Boxi Park
Day 3 11/19/22	8:30AM-9:15AM	3RD Keynote Speaker: Tiago Falk	Auditorium 133
	9:15AM-9:30AM	Break	3RD Floor Lobby & Outdoor Patio
	9:30AM-10:45AM	6TH Technical Session	Auditorium 133
	9:30AM-10:45AM	1st Student Paper Session	Auditorium 334
	10:45AM-11:00AM	Break	3RD Floor Lobby & Outdoor Patio
	11:00AM-12:15PM	7TH Technical Session	Auditorium 133
	11:00AM-12:15PM	2ND Student Paper Session	Auditorium 334
	12:15PM-1:30PM	Lunch	3RD Floor Lobby & Outdoor Patio
	1:30PM-2:45PM	3RD Student Paper Session	Auditorium 334
	2:45PM-3:00PM	Break	3RD Floor Lobby & Outdoor Patio
	3:00PM-4:15PM	8TH Technical Session	Auditorium 133
	4:15PM-4:30PM	Break & Dissertation Research Awards Presentation by Wayne Giang	3RD Floor Lobby & Outdoor Patio
	4:30PM-5:45PM	9TH Technical Session	Auditorium 133
	5:45PM	Adjourn	

Autumn School Schedule At-A-Glance

ISACT – AUTUMN SCHOOL			
11/16/22	8:00AM - 5:00PM	Technical Sessions & Networking Program	Room 131
11/17/22	8:00AM - 5:00PM	Technical Sessions & Networking Program	Room 131
11/18/22	8:00AM - 5:00PM	Technical Sessions & Networking Program	Room 131
11/19/22	8:00AM - 5:00PM	Technical Sessions & Networking Program	Room 131

Situation Awareness in Cognitive Technologies is a trending research direction that gained a lot of interest from the industry in recent years. Situation awareness is the key to providing the best possible user experience and supplying the user with the most relevant content – by establishing a grounded assessment of interactions, actions, etc., based on the environmental elements and corresponding events. With the astonishing development of the field of machine learning, especially of deep learning, one of the important aspects of the situation awareness of the machine learning models is by means of explainability. Therefore, this school this autumn aims to present the fundamental aspects of situation awareness in cognitive technologies, which can be discussed in an interdisciplinary context, and will mainly be focusing on Human-Computer Interaction (HCI), Brain-Computer Interface (BCI) and Explainable AI (XAI). Going with the theme of this year's ICHMS 2022, the Autumn school will also be focusing on the topic of "human-autonomy teaming" in different areas – robotics, industry 4.0, autonomous driving, even medicine. To make this school an interactive learning experience, we would encourage the participants to share their research presentations (posters) related to the above-mentioned topics.

This year's edition intends to bring together academia and industry to provide a large practical perspective to undergraduate and graduate (including early-stage PhD) students, as well as to young industry personnel.

UFRAC Room 131

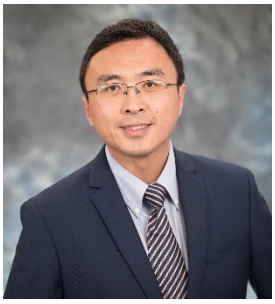
Keynote Speakers

"As We May Interact: Moving Towards Natural Human-Machine Collaborations."

Dr. Jaime Ruiz, Ph.D.

Dr. Jaime Ruiz is an Associate Professor in the Department of Computer & Information Science & Engineering at the University of Florida, where he directs the Ruiz HCI Lab. Before joining the University of Florida in 2016, he was a faculty member at Colorado State University. His primary research is in the field of Human-Computer Interaction, focusing on multimodal and natural user interfaces. Dr. Ruiz received his Ph.D. in Computer Science from the University of Waterloo. He also holds a M.S. in Computer Science from San Francisco State University and a B.S. in Psychology from the University of California, Davis. Dr. Ruiz's work has been funded by NSF, DARPA, NIH, USDA, and Google. In 2018, he was awarded an NSF CAREER award for his project on next-generation multimodal interfaces.

Schedule: November 17, 5:30PM-6:15PM, UFRAC Room 133.



"Embodied Teleoperation via Human-Robot Sensory Transfer"

Dr. Eric Jing Du, Ph.D.

Dr. Eric Jing Du is an associate professor in the Department of Civil Engineering, and the Department of Industrial and System Engineering (affiliate) in the Herbert Wertheim College of Engineering, University of Florida. Before joining University of Florida in January 2019, he was a faculty member at Texas A&M University, and a senior production analyst at Zachry Industrial in San Antonio, TX. His primary area of research is human-robot collaboration for complex industrial operations. His ongoing projects involve the use of Mixed Reality and haptic stimulation to enhance physical embodiment in robot teleoperation. With his colleagues, Dr.Du has secured more than $12 million in federal funding from National Science Foundation (NSF), the National Aeronautics and Space Administration (NASA), and National Institute of Standards and Technology (NIST), with more than $5 million directly attributed to him. Dr. Du has published more than 130 referred journal and conference papers, including several best paper awards from high impact journals. Dr.Du is the elected Secretary of the American Society of Civil Engineers (ASCE) Visualization, Information Modeling and Simulation (VIMS) committee, and serves on the editorial board of three journals. Dr.Du received his PhD degree in construction engineering from Michigan State University (2012), master's degree in Enterprise Management (2007) and bachelor degree in Civil Engineering (2004), both from Tianjin University in China.

Schedule: November 18, 11:15AM-12:00PM, UFRAC Room 133.

"Wearable Brain-Computer Interfaces and VR : Neuroergonomics Meets the Metaverse."

Dr. Tiago H. Falk, Ph.D.

Dr. Tiago H. Falk is a Full Professor at the Institut national de la recherche scientifique, University of Quebec in Montreal, Canada. He is Co-Chair of the IEEE SMC Technical Committee on Brain-Machine Interface Systems, has served as Co-Chair of the IEEE SMC Brain-Machine Interface Workshop since 2018, and is an Associate Editor of the IEEE SMC Transactions on Human-Machine Systems and of the Frontiers in Neuroergonomics journal. He directs the Multisensory Signal Analysis and Enhancement Lab where he and his team work on integrating signal processing and machine learning to make next-generation (multisensory) human-machine interfaces usable in highly ecological settings. His work has been showcased in over 340 journal papers, conference proceedings, books and book chapters, and patents. Dr. Falk received his postdoctoral training in neuroengineering at the University of Toronto, his PhD and MSc degrees in multimedia signal processing and machine learning from Queen's University in Kingston (Canada), and his BSc in Electrical Engineering from the Federal University of Pernambuco (Brazil).

Schedule: November 19, 8:30AM-9:15AM, UFRAC Room 133.

Technical Sessions

These sessions are aimed at presenting significant research contributions that are of interest for a broader human-machine systems audience.

DAY	START TIME	END TIME	SESSION	ORDER	ROOM	PAPER ID	AUTHOR(S)	TITLE
11/18	8:15	9:30	Tech #1 - VR & MR	1	133	819	Sebastian Pimminger, Werner Kurschl and Johannes Schönböck	Mixed Reality Workplace Training Systems for Smart Factories: Challenges and Future Directions
11/18	8:15	9:30	Tech #1 - VR & MR	2	133	6855	Leon Pietschmann, Thomas Bohné and Maria Tsapali	Extended Reality Visual Guidance for Industrial Environments: A Scoping Review
11/18	8:15	9:30	Tech #1 - VR & MR	3	133	9164	Jieun Lee, Tatsuru Daimon and Satoshi Kitazaki	Exploring Assistance Methods for Communication between Pedestrians and Automated Vehicles: A Need-Driven Study in Japanese Depopulated Areas
11/18	8:15	9:30	Tech #1 - VR & MR	4	133	572	Aaron Gluck, Hannah Solini, Kuntal Maiti and Julian Brinkley	Evaluating 3D Printed VR Controller Prototypes to Increase VR Accessibility for Older Adults
11/18	8:15	9:30	Tech #1 - VR & MR	5	133	3843	Allison Bayro, Ting Dai and Heejin Jeong	Gender Disparities in Perceived Virtual Reality Presence: A Structural Equation Modeling Approach to Publicly Available Igroup Presence Questionnaire Data
DAY	**START**	**END**	**SESSION**	**ORDER**	**ROOM**	**ID**	**AUTHOR(S)**	**TITLE**
11/18	9:45	11:00	Tech #2 - WEARABLES & XAI	1	133	3539	Prakash Baskaran, Joshua Bhagat Smith and Julie A. Adams	Visual task recognition for human-robot teams
11/18	9:45	11:00	Tech #2 - WEARABLES & XAI	2	133	6602	Giulia Apicella, Giuseppe D'Aniello, Giancarlo Fortino, Matteo Gaeta, Raffaele Gravina and Luca Giuseppe Tramuto	An Adaptive Neuro-Fuzzy Approach for Activity Recognition in Situation-aware Wearable Systems
11/18	9:45	11:00	Tech #2 - WEARABLES & XAI	3	133	5291	Joshua Bhagat Smith, Prakash Baskaran and Julie A. Adams	Decomposed Physical Workload Estimation for Human-Robot Teams
11/18	9:45	11:00	Tech #2 - WEARABLES & XAI	4	133	1463	Philip Pham, Vineetha Menon, Kristin Weger, Bryan Mesmer and Sampson Gholston	A Case Study of Human-AI Interactions Using Transparent AI-Driven Autonomous Systems for Improved Human-AI Trust Factors
11/18	9:45	11:00	Tech #2 - WEARABLES & XAI	5	133	8749	Joseph Schwalb, Vineetha Menon, Nate Tenhundfeld, Kristin Weger, Bryan Mesmer and Sampson Gholston	A Study of Drone-based AI for Enhanced Human-AI Trust and Informed Decision Making in Human-AI Interactive Virtual Environments
DAY	**START**	**END**	**SESSION**	**ORDER**	**ROOM**	**ID**	**AUTHOR(S)**	**TITLE**
11/18	13:30	14:45	Tech #3 - HRI & ERGO	1	133	4179	Travis Deegan, Praneel Acharya, Kim-Doang Nguyen and Marco Ciarcia	Toward a Holistic Framework for Human-Robot Coordination
11/18	13:30	14:45	Tech #3 - HRI & ERGO	2	133	5535	Dimitris Panagopoulos, Giannis Petousakis, Aniketh Ramesh, Tianshu Ruan, Grigoris Nikolaou, Rustam Stolkin and Manolis Chiou	A Hierarchical Variable Autonomy Mixed-Initiative Framework for Human-Robot Teaming in Mobile Robotics
11/18	13:30	14:45	Tech #3 - HRI & ERGO	3	133	5308	Andrew Washburn, Dave Feil-Seifer, Jim La, Kripash Shrestha and Habib Ahmed	Exploring Human Compliance Toward a Package Delivery Robot
11/18	13:30	14:45	Tech #3 - HRI & ERGO	4	133	8357	David Kostolani, Michael Wollendorfer and Sebastian Schlund	ErgoMaps: Towards Interpretable and Accessible Automated Ergonomic Analysis
11/18	13:30	14:45	Tech #3 - HRI & ERGO	5	133	4527	Snehal Dhengre and Ling Rothrock	Understanding Worker's Approach in a Conventional Assembly Line: An Observational Study Using Network Analysis

DAY	START	END	SESSION	ORDER	ROOM	ID	AUTHOR(S)	TITLE
11/18	15:00	16:15	Tech #4 - HAI & HCD	1	133	6083	Patrik Schuler and X. Jessie Yang	Humans working with imperfect automation: a meta-analysis on blind compliance, reliance, and dependence behaviors
11/18	15:00	16:15	Tech #4 - HAI & HCD	2	133	6948	Jie Liu and Boyu Sui	Towards an Auxiliary Perception Conception for Improvement of the Situation Awareness in UAV Operation
11/18	15:00	16:15	Tech #4 - HAI & HCD	3	133	1364	Hisham Ghunaim, Troy Weekes and Thomas Eskridge	Designing an AI Assistant for Student Telehealth: A Case Study Using Human-Centered Design
11/18	15:00	16:15	Tech #4 - HAI & HCD	4	133	6193	Nita Prabhu, Luis Vargas and Xiaogang Hu	Quantitative characterization of haptic sensory adaptation evoked through transcutaneous nerve stimulation
DAY	START	END	SESSION	ORDER	ROOM	ID	AUTHOR(S)	TITLE
11/18	16:30	17:45	Tech #5 - TRUST	1	133	9528	Alessandro Casadei, Stephan Schlögl and Markus Bergmann	Chatbots for Robotic Process Automation: Investigating Perceived Trust and User Satisfaction
11/18	16:30	17:45	Tech #5 - TRUST	2	133	843	Matthew Bolton, Elliot Biltekoff and Kevin Byrne	Fuzzy Mental Model Finite State Machines: A Mental Modeling Formalism for Assessing Mode Confusion and Human-machine Trust
11/18	16:30	17:45	Tech #5 - TRUST	3	133	4359	Rachel Sutton and Lisa Vangsness	Decision–Making at Intersections
11/18	16:30	17:45	Tech #5 - TRUST	4	133	5538	Kendall Carmody, Meredith Carroll and Daniel Nguyen	Developing A Dynamic Testbed: Designing for Trust in Complex Human Agent Teams
11/18	16:30	17:45	Tech #5 - TRUST	5	133	8981	Kazi Farzana Firoz, Younho Seong and Seuung Oh	A neurobehavioral approach to classify trust from mistrust by interpreting EEG signals using machine learning techniques
DAY	START	END	SESSION	ORDER	ROOM	ID	AUTHOR(S)	TITLE
11/19	9:30	10:45	Tech #6 - BCI & EEG	1	133	3775	Joshua Ho, Chien-Min Wang, Chun-Hsiang Chuang, Chung-Ta King, Chi-Wei Feng, Tun-Hsiang Chou, Yen-Min Chen, Yu-Hsin Yang and Yi-Cheng Hsiao	Bootstrapping Human-Autonomy Collaborations by using Brain-Computer Interface of SSVEP for Multi-Agent Deep Reinforcement Learning
11/19	9:30	10:45	Tech #6 - BCI & EEG	2	133	1921	Pratusha Reddy, Patricia A. Shewokis and Kurtulus Izzetoglu	Can Variability of Brain Acitivity serve as a Metric for Assessing Human Performance during UAS Dual-Task Training
11/19	9:30	10:45	Tech #6 - BCI & EEG	3	133	2716	Nikolas Nakov and Maryam Alimardani	Using EEG Brain Signals to Predict Children's Learning Performance During Technology-assisted Language Learning
11/19	9:30	10:45	Tech #6 - BCI & EEG	4	133	7048	Chanyoung Ko, Yu Rang Park, Soon-Beom Hong, Jaehyun Lim, Mindong Sung, Bongkyung Jang and Soyeon Kang	AI-assisted Initiation to Joint Attention Evaluation for Autism Spectrum Disorder Detection
11/19	9:30	10:45	Tech #6 - BCI & EEG	5	133	2920	Rinku Roy, Derek Kamper and Xiaogang Hu	Concurrent Decoding of Finger Kinematic and Kinetic Variables based on Motor Unit Discharges
DAY	START	END	SESSION	ORDER	ROOM	ID	AUTHOR(S)	TITLE
11/19	11:00	12:15	Tech #7 - HMT THEORY	1	133	4825	Dale Richards, Kelvin Yeung, Ian Griffiths and Jennie Cowell-Butler	Designing for Human-Machine Teams: A methodological enquiry
11/19	11:00	12:15	Tech #7 - HMT THEORY	2	133	8857	Jonas Rockbach, Thomas Witte, Sven Fuchs and Luka-Franziska Bluhm	Ingredients for Hybrid Intelligence: Towards an Integrated Theory and Application
11/19	11:00	12:15	Tech #7 - HMT THEORY	3	133	3711	Dale Richards and Jennie Cowell-Butler	Decisions within Human-Machine Teaming: The introduction of Decision Strings
11/19	11:00	12:15	Tech #7 - HMT THEORY	4	133	4937	Vineetha Menon, Kristin Weger, Bryan Mesmer and Sampson Gholston	Using Big Data Analytics for Sentiment Analysis to Explore Team Communication Dynamics in Human Machine Interactions for Team Situational Awareness
11/19	11:00	12:15	Tech #7 - HMT THEORY	5	133	4546	Yang Li, Geoff Lei, Linh Bui and Chengwei Lei	A Hidden Markov Model Based Intelligent Platform for Characterizing Behaviors

DAY	START	END	SESSION	ORDER	ROOM	ID	AUTHOR(S)	TITLE
11/19	15:00	16:15	Tech #8 - HMT PRACTICE	1	133	1125	April Tieu and Neelam Naikar	Visualizations for human-machine teams in complex environments: design concepts and review of current approaches
11/19	15:00	16:15	Tech #8 - HMT PRACTICE	2	133	7514	Tingjun Lei, Pradeep Chintam, Chaomin Luo and Gene Eu Jan	A Human-Autonomy Teaming-Based Robot Informative Path Planning and Mapping Algorithm with Tree Search Mechanism
11/19	15:00	16:15	Tech #8 - HMT PRACTICE	3	133	8773	Gijs de Rooij, Adam Tisza, Clark Borst, René van Paassen and Max Mulder	Human-Automation Teamwork in Air Traffic Control: Task Analysis for Shared En-Route Airspace
11/19	15:00	16:15	Tech #8 - HMT PRACTICE	4	133	9856	Michael Tolston, Simon Hosking, Melissa Stollar, Christopher Best and Gregory Funke	Detection of Changes in Team Dynamics in Simulated Air Battle Management: Univariate vs. Multivariate Analyses
11/19	15:00	16:15	Tech #8 - HMT PRACTICE	5	133	9420	Dean La Monica, Michael Miller and Kim Drnec	Employing MBSE for Assess and Evaluate Human Teaming in Military Aviation Command and Control Applications
DAY	START	END	SESSION	ORDER	ROOM	ID	AUTHOR(S)	TITLE
11/19	16:30	17:45	Tech #9 - AUTOMATED DRIVING	1	133	1189	Aaron Gluck, Min Deng, Yijin Zhao, Carol Menassa, Da Li, Julian Brinkley and Vineet Kamat	Exploring Driver Physiological Response During Level 3 Conditional Driving Automation
11/19	16:30	17:45	Tech #9 - AUTOMATED DRIVING	2	133	2252	Julian Brinkley, Earl Huff Jr. and Aaron Gluck	Design Techniques for Exploring Accessible Human-Autonomous Vehicle Interaction in the Age of Vehicular Automation
11/19	16:30	17:45	Tech #9 - AUTOMATED DRIVING	3	133	4097	Aaron Gluck, Julian Brinkley, Earl Huff Jr. and Kwajo Boateng	Toward a Framework for Embodiment in Emerging Transportation Technologies for Facilitating In-Vehicle Experiences for Vulnerable and Disabled Road Users
11/19	16:30	17:45	Tech #9 - AUTOMATED DRIVING	4	133	9828	Earl W. Huff Jr., Natalie Tucker, Siobahn Day Grady and Julian Brinkley	What Can My Car Tell Me? Consumer Perceptions of Transparency in Self-Driving Vehicles

Poster Session

This special session is intended to showcase new research with preliminary results to elicit feedback from other researchers. The session is intended to promote active exchange of attendees and presenters on focused research topics.

DAY	START	END	SESSION	ORDER	ROOM	ID	AUTHOR(S)	TITLE
11/18	15:00	17:45	Poster	1	301	131	Sara Hong, Hyun Jun Lim, Chang Won Lee, June Seung Lee and Ji Hyun Yang	A study on EEG-based carelessness warnings to bus driver
11/18	15:00	17:45	Poster	2	301	1814	Hee Jeong Kim, Kihee Park, Yeong-Hun Park and Ji Hyun Yang	Comparative Simulator Experiment on Preventing Motion Sickness by Aromatherapy Inhalation Based on MISC and EEG
11/18	15:00	17:45	Poster	3	301	2118	Jongwoo Park, Myeongkyu Lee, Jooyoung Maeng, Changnam Ahn and Ji Hyun Yang	STPA-based Identification of Safety Requirements from the Perspective of Drivers in Take-Over Request Situation
11/18	15:00	17:45	Poster	4	301	2135	Sabina Patel, Elizabeth Phillips and Elizabeth Lazzara	Updating the paradigm: Investigating the role of swift trust in human-robot teams
11/18	15:00	17:45	Poster	5	301	3333	Phuoc Thai, Fernando Montalvo, Daniel McConnell and Janan Smither	User vs. System Conceptual Models of Productivity and Accountability in Human-Machine Interaction.
11/18	15:00	17:45	Poster	6	301	5652	Fernando Montalvo, Phuoc Thai, Promise Stephens, Luciana Jones,	User and Robot Personality Interactions in Parasocial Presence and Intention to Use Social Robots

							Daniel McConnell and Janan Smither	
11/18	15:00	17:45	Poster	7	301	6631	Jay K. Shah, Aakash Yadav, Sarah Hopko, Prabhakar R. Pagilla and Ranjana K. Mehta	Robot Adaptation Under Operator Cognitive Fatigue Using Reinforcement Learning
11/18	15:00	17:45	Poster	8	301	7425	Jordan Sasser, Daniel McConnell and Janan Smither	Investigation of Aspects of Embodiment on User Perceptions in Human-Robot Interactions.
11/18	15:00	17:45	Poster	9	301	7959	Erin Chiou, Pouria Salehi, Erik Blasch, James Sung, Myke Cohen, Anna Pan, Michelle Mancenido, Ahmadreza Mosallanezhad, Yang Ba and Shawaiz Bhatti	Trust in AI-Enabled Decision Support Systems Preliminary Validation of MAST Criteria
11/18	15:00	17:45	Poster	10	301	8086	Minal Shah, Anne Marie Engelsen and Gaojian Huang	A Systematic Review of Older Adults' Interactions with Smart Home Technology
11/18	15:00	17:45	Poster	11	301	9649	Luis Gomero, Michael Sommeling, Juana Perez, Jobaidul Boni, Seri Park, Kate Hyun and Meltem Izzetoglu	Evaluation of Electrodermal Activity during Distracted Driving

UFRAC Room 301 (3RD Floor Lobby)

Student Papers

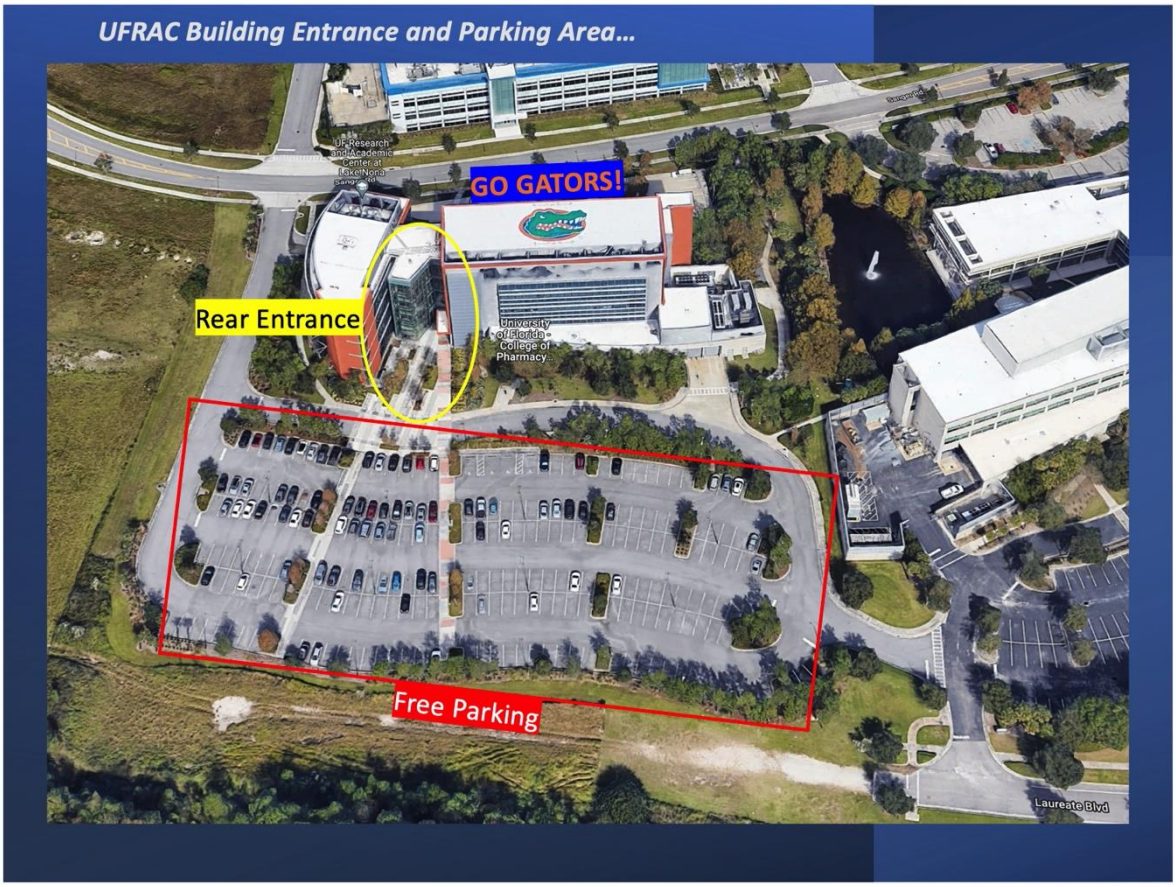
These sessions are intended to promote dissemination and exposure of student research, including PhD doctoral research work. It is expected that senior researcher will attend these sessions and provide students with critical feedback. All doctoral candidate presenters will be considered for the IEEE ICHMS 2022 Doctoral Candidate Awards (DAC; as noted below).

DAY	START	END	SESSION	ORDER	ROOM	ID	AUTHOR(S)	TITLE
11/19	9:30	10:45	Student session #1	1	334	2285	Joseph Glavan, Ellen Bass, Julie Adams, Christopher Sanchez and Tyler Read	Measures of Attention in Autonomous and Semi-Autonomous Multi-Vehicle Supervision
11/19	9:30	10:45	Student session #1	2	334	2701	Matthew Scalia, Julie Harrison, Shiwen Zhou, David Grimm and Jamie Gorman	Interaction with an Autonomous Team Member Determines the Relationship between Team Trust and Team Performance
11/19	9:30	10:45	Student session #1	3	334	7362	Jade Driggs and Lisa Vangsness	Changes in Trust in Automation After Performing a Visual Search Task With An Automated System
11/19	9:30	10:45	Student session #1	4	334	5076	Myeongkyu Lee, Sangho Lee, Sungwook Hwang, Sejoon Lim and Ji Hyun Yang	Acquiring Driving Characteristic Data According to Driver Emotions and Proposing Emotion Groups in the Driving Context
11/19	9:30	10:45	Student session #1	5	334	2217	Yunmei Liu, David Kaber, Sima Sabahi, Christopher Cunningham and Kihyun Pyo	Machine Learning Models of Erroneous Driver Actions at Novel Interchange Configurations
DAY	**START**	**END**	**SESSION**	**ORDER**	**ROOM**	**ID**	**AUTHOR(S)**	**TITLE**
11/19	11:00	12:15	Student session #2	1	334	1503	Hakar Saber, Nawzad Al-Salihi and Rebaz Omer	Visually Impaired People Navigation System using Sensors and Neural Network
11/19	11:00	12:15	Student session #2	2	334	7739	**DAC** - Vanessa Nasr and Maryam Zahabi	Usability Evaluation Methods of Indoor Navigation Apps for People with Disabilities: A Scoping Review
11/19	11:00	12:15	Student session #2	3	334	679	**DAC** - Sarah Walsh and Karen Feigh	Consideration of Strategy-specific Adaptive Decision Support
11/19	11:00	12:15	Student session #2	4	334	8308	**DAC** - Divya Srivastava, J. Mason Lilly and Karen M. Feigh	The Impact of Improving Shared Situation Awareness on AI-Advised Decision Making
11/19	11:00	12:15	Student session #2	5	334	9276	Yu-Liang Weng, Shih-Yi Chien and Szu-Yin Lin	Explainable AI Framework for Fake Reviews Detection
DAY	**START**	**END**	**SESSION**	**ORDER**	**ROOM**	**ID**	**AUTHOR(S)**	**TITLE**
11/19	13:30	14:45	Student session #3	1	334	5316	**DAC** - Yue Luo, Yuhao Chen, Mustafa Ozkan Yerebakan, Shuai Hao, Nicolas Grimaldi, Chizhao Yang, Read Hayes and Boyi Hu	How Do Humans Adjust Their Motion Patterns in Mobile Robots Populated Retail Environments?
11/19	13:30	14:45	Student session #3	2	334	1155	**DAC** - Yuhao Chen, Yue Luo, Mustafa Yerebakan, Shuyan Xia, Sara Behdad and Boyi Hu	Human Workload and Ergonomics during Human-Robot Collaborative Electronic Waste Disassembly
11/19	13:30	14:45	Student session #3	3	334	7426	**DAC** - Mustafa Ozkan Yerebakan, Yuhao Chen, Christopher Arend Tatsch, Yu Gu and Boyi Hu	Factors that Affect Acceptance of Agricultural Robots and Wearable Technologies by Agricultural Stakeholders: A Pilot Survey
11/19	13:30	14:45	Student session #3	4	334	2281	**DAC** - Jiancheng Nie, Yusuke Sugahara and Yukio Takeda	Design of Wearable Robotic Support Limbs for Walking Assistance Based on Configurable Support Polygon
11/19	13:30	14:45	Student session #3	5	334	8056	**DAC** - Junho Park, Joseph Berman, Albert Dodson, Yunmei Liu, Armstrong Matthew, He Huang, David Kaber, Jaime Ruiz and Maryam Zahabi	Cognitive Workload Classification of Upper-limb Prosthetic Devices

UFRAC Room 133

UFRAC Room 334

Commuting Information



Alternate Transportation Options

Although meeting participants/attendees are encouraged to arrange for **rental cars** in the Orlando area (as described on the "Venue" page: https://www.ise.ufl.edu/ichms2022/about/venue/), there are a number of alternate transportation options for Lake Nona.

Ride-share (Uber (uber.com) and Lyft (lyft.com)) services are highly accessible due to the proximity of our venue to the international airport. The same applies for taxi or hired-car services (https://www.orlandoairports.net/parking-transportation/).

Beyond these options, Lake Nona also has an **Automated Shuttle Service ("Move Nona")**. Route 4 ("Red Line") provides partial transport from Lake Nona Downtown in the direction of UFRAC (stopping at UCF/VA Hospitals). The City of Orlando also provides many alternative transportation options that extend to Lake Nona (https://www.downtownorlando.com/Parking-Getting-Around/Getting-Around). These include buses, car shares, bike shares, scooter shares, etc.

Finally, the Conference administration has reserved a **12-passenger van** for limited transport of participants from Lake Nona Downtown (the Marriott Residence Inn) to the UFRAC with return according to the following schedule.

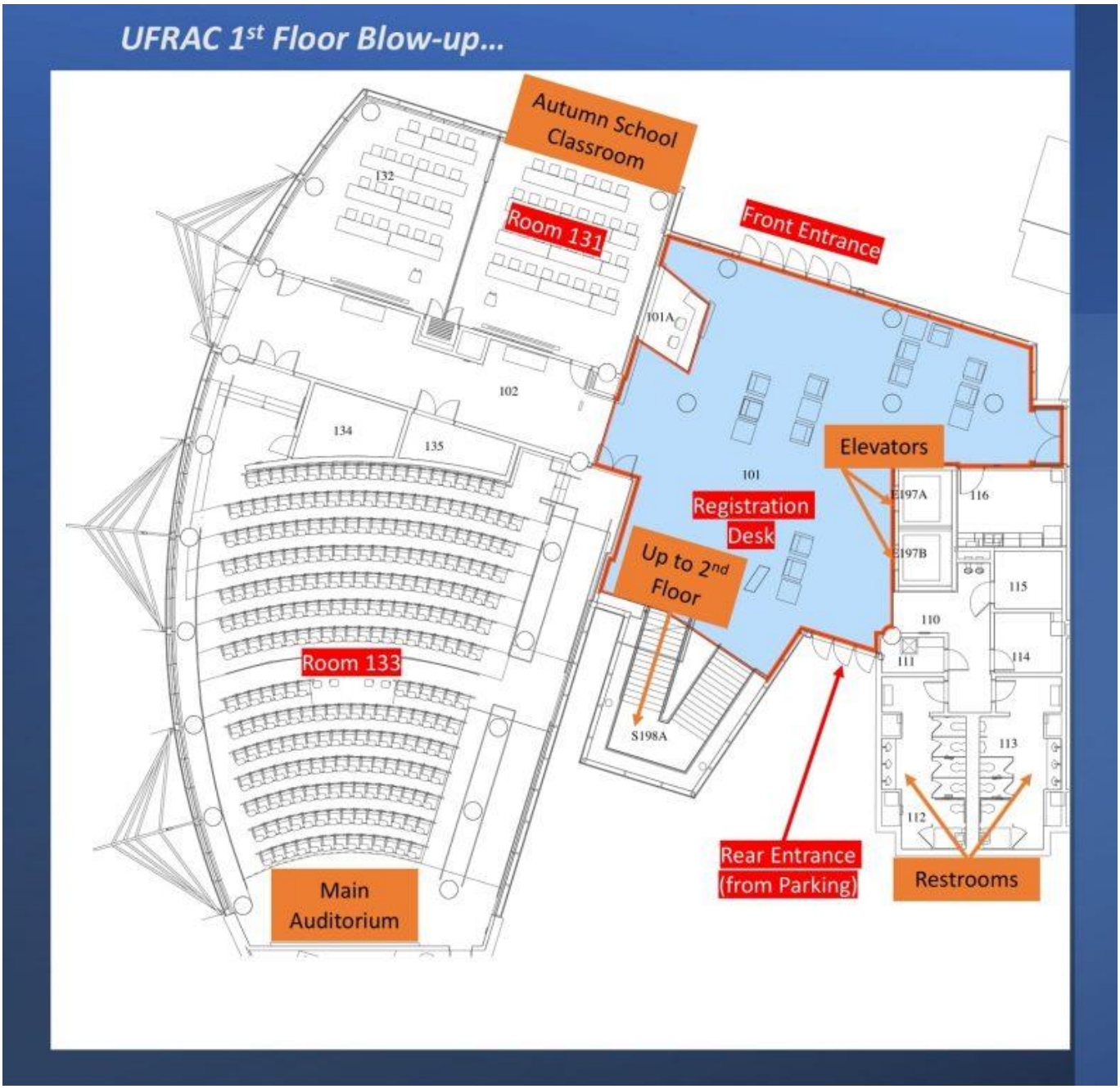
11/17/22
4:50PM (Depart) – Residence Inn Lake Nona TO UFRAC – 5:00PM (Arrive)
6:25PM (Depart) – UFRAC to Residence Inn Lake Nona – 6:35PM (Arrive)

11/18/22
7:50AM (Depart) – Residence Inn Lake Nona TO UFRAC – 8:00AM (Arrive)
5:55PM (Depart) – UFRAC to Residence Inn Lake Nona – 6:05PM (Arrive)

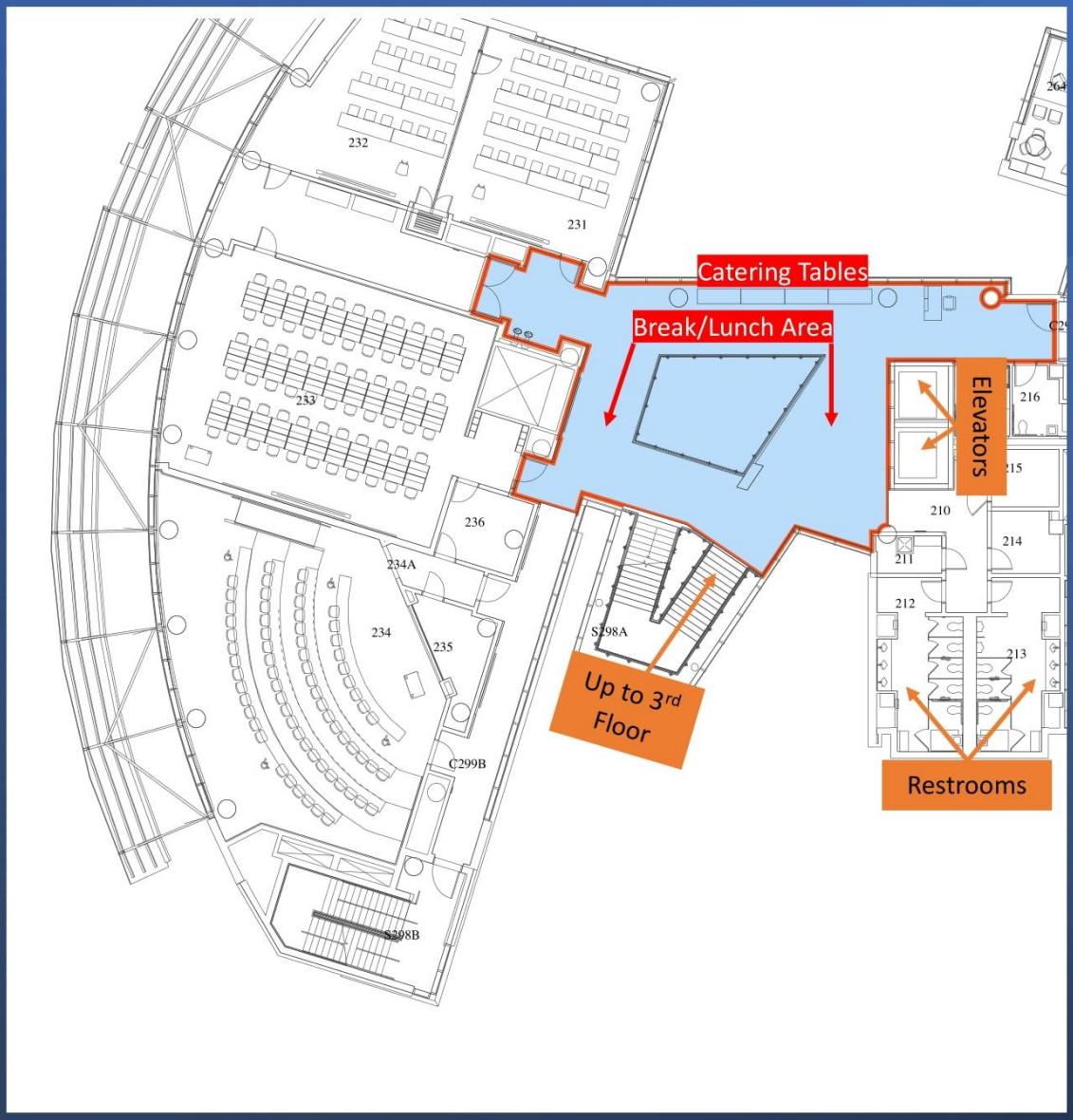
11/19/22
8:05AM (Depart) – Residence Inn Lake Nona TO UFRAC – 8:15AM (Arrive)
5:55PM (Depart) – UFRAC to Residence Inn Lake Nona – 6:05PM (Arrive)

(Up to two (2) repeat trips will be made in each timeframe, if necessary.)

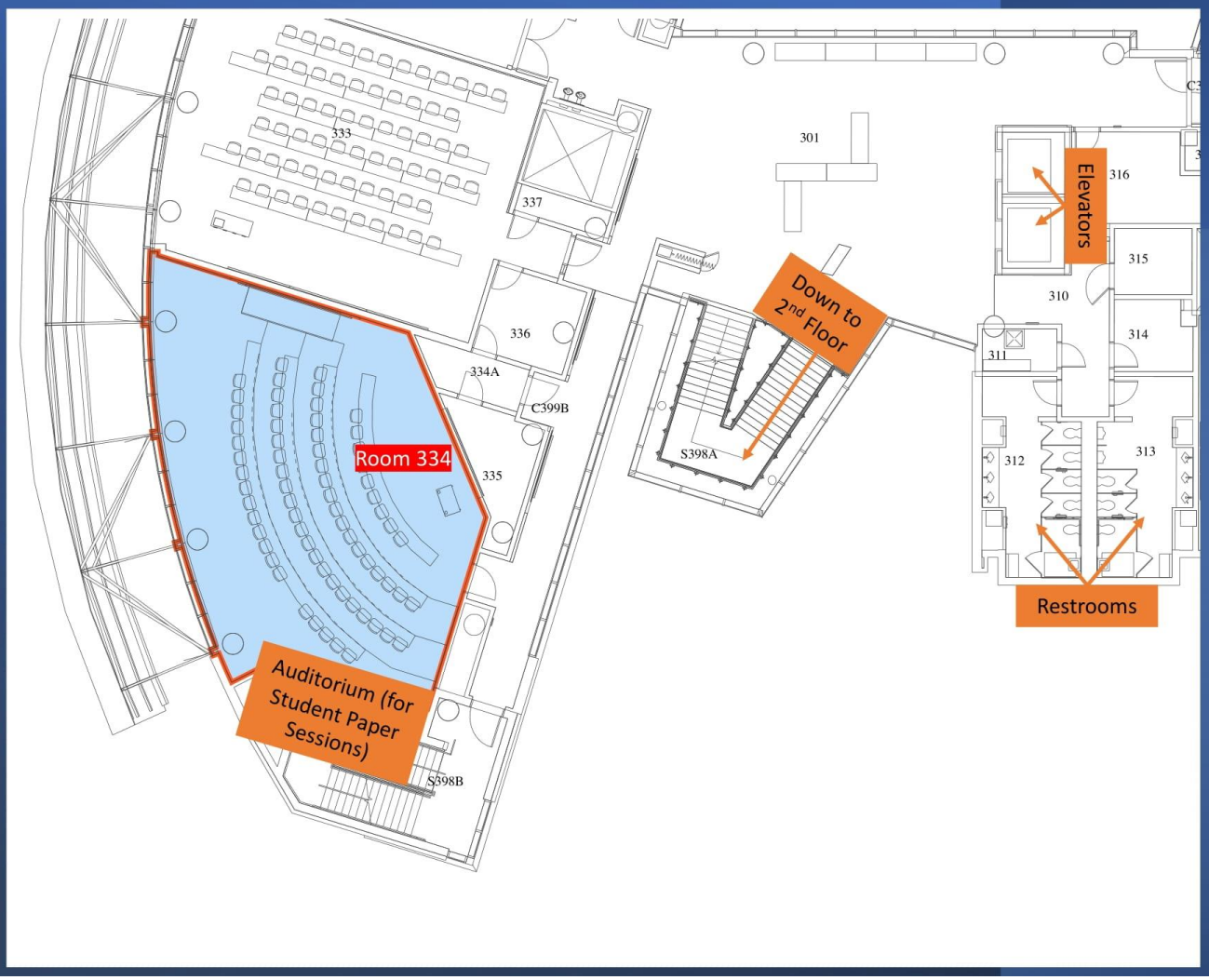
Conference Facility Floor Plans



UFRAC 2nd Floor Blow-up…



UFRAC 3rd Floor Blow-up…



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