MSME Project/Thesis Presentation Schedule

CLASS 295B - FALL 2023 - 1 hour

STUDENT NAME	Chair	Committee	Presentation Date and Time	PROJECT
Ahir, Hinal	Viswanathan	Syed Zaidi, Ken Youssefi	12/08 _10:00-11:00	Design and Optimization of the Braking System and Suspension System for a Small Scale Hyperloop Pod
Arzadon,Van Christopher Ragas	Bashash	Neyram Hemati, Burford Furman	12/12 18:00-19:00	Design and Control of an Alternating Current and Direct Current Power System
Dantkale,Rohit Sanjay	Barez	James Mokri, Vimal Viswanathan	12/07_13:30-14:30	Crashworthiness of Autonomous Shuttle
Edwards, Benjamin	Kazemifar	Ali Tohidi, Dr. Jun-Sik Lee	12/19 _09:00-10:00	TRANSIENT CFD ANALYSIS OF A LIQUID HELIUM CRYOSTAT FOR USE IN ULTRA HIGH VACUUM TO COOL TEMPERATURE SAMPLE MATERIALS
Hoang, Kathy	Viswanathan	Mojtaba Sharifi, Saeid Bashash	12/12 _10:00-11:00	Robotic Design of Microcontroller for Multi-Terrain Robot With End Effectors
Hofmeijer,Niels Jacco Joha	Armani	Raymond Yee, Vimal Viswanathan	12/12 _14:00-15:00	Ceramic On-Demand Extrusion and Mechanical Characterization of Silicon Carbide Parts
Jagannath, Bharadwaj	Amirkulova	Birsen Sirkeci, Lin Jiang	12/12_13:30-14:30	Volumetric Sound Metadiffusers Using Deep Learning
Kumar, Venkat Prasanna	Tohidi	Ken Youssefi, Ernest Thurlow	12/08_17:10-18:10	Wildfire spread forecasting model using the combination of convolutional neural networks (CNN) and variational autoencoders (VAE)
Liang, West (Weipeng)	Armani	Kourosh Youssefi, Lin Jiang	12/13_13:00-14:00	Fabricating Geometrically Complex Engineering Components with Ceramics On-Demand Extrusion (CODE) Process
Lopez, (Gerardo Javier)Jerry	Sharifi	Lin Jiang, Saeid Bashash	12/13 14:00-15:00	Controller Design and Implementation for an Autonomous Assistive Walker
Nobal,Tom Cruz	Tohidi	Farzan Kazemifar, Ernest Thurlow	01/22_10:00-11:00	Computational Model for Firebrand Heat Transfer
Patel,Avadhkumar Jitubhai	Du	Raymond Yee, Dr. Joseph Stetter	12/13 16:30-17:30	Development of an Experimental Chamber and Data Acquisition System for H2 Leak Detection and Quantification
Patil, Sagar Sanjeev	Yee	Feruza Amirkulova, Ken Youssefi	12/15_15:30-16:30	Development of an Onboard Deep Learning System for a Smart Personal Mobility Vehicle for Urban Transport
Pokras, David	Viswanathan	Yanika Schneider, Syed Zaidi	12/12 _1300-1400	Design and Fabrication of a 4D Printer for Studying the Influence of Geometric Conditions on Quality and Magnitude of Shape Change Effect
Rodrigues, Ernest James	Furman	Ken Youssefi, Ron Swenson	12/11 _17:00-18:00	Curriculum Development and Dynamic Analysis Comparison of SolidWorks Motion and ANSYS Motion
Rozhkov,Anton Sergeyevich	Armani	Feruza Amirkulova, Vimal Viswanathan	12/11 - 14:00-15:00	Representation Model For Functionaly Graded Materials Using Unstructured Point Data
Shaik Vadla, Mohammad Khalid	Viswanathan	Feruza Amirkulova, Mahima Agumbe Suresh	12/12 - 15:00-16:00	Online Product Review Analysis to Automate the Extraction of Customer Requirements
Sharma, Anubhav Kumar	Sharifi	Raymond Yee, Ken Youssefi	12/11 _14:00-15:00	Structural Design, Analysis and Manufacturing of an Intelligent Robotic Walker
Varun, Kanishk	Tohidi	Farzan Kazemifar, Saeid Bashash	12/13 _11:30-12:30	Development and characterization of a morphing fan wing
Wong, Michelle	Bashash	Neyram Hemati, Shangjie Ma	12/07 _18:00-19:00	Development of an Integrated Controls System Toolbox Interface for Testing, Characterizing, and Control of Motion Platforms

CLASS 295A - FALL 2023 - 30 mn

STUDENT NAME	Chair	Committee	Presentation Date and Time	PROJECT
Aldana Montejo,Carlos	Jiang	Raymond Yee, Gaojin Huang	12/11 _19:30-20:00	Facilitate Bilateral Human-Robot Interaction using Haptic Wearable Gloves and Virtual Reality Feedback
Andjui,Akoua Marie Emmanuella	Han	Farzan Kazemifar, Hussam Kabbani	12/13 10:30-11:00	Development of multiplexed single-particle loading device for ITP extraction of single-cell DNA
Ayele, Beniam	Bashash	Winncy Du, Lin Jiang	12/13 16:00-16:30	EV Battery Cycler with Programmable Charging Protocol Futures
Banzon,Angelo	Jiang	Mojtaba Sharifi, Saeid Bashash	12/11 _12:30-13:00	Bilateral Model Reference Adaptive Impedance Controller of a Tele-robotic System for Upper Arm Physical Therapy
Benavides,Gerson	Armani	Mojtaba Sharifi, Lin Jiang	12/12_15:00-15:30	Integrating a Second Extruder into the Ceramic On-Demand Extrusion System
Boggula,Vamsirami_Reddy	Armani	Lin Jiang, Raymond Yee	12/12_16:30-17:00	Mechanical Characterization of Ceramic On-Demand Extruded Silicon Carbide Parts
Brunnett,Justin	Armani	Feruza Amirkulova, Ozgur Keles	12/13_12:30-13:00	Mechanical Optimization and Simulation of 3D Printed Titanium Super Alloy
Bui, Rachel	Du	Xi Feng, Yun Wang	12/13_13:00-13:30	Development of Beef Quality Degradation Sensor
Chau,Tiffany	Sharifi	Eduardo Chan, Josh Nelson	12/11 _12:00-12:30	A New Structural Design, Mechanical Analysis, and Fabrication of a Lightweight Robotic Walker
Chen, (Hugo) Junlin	Sharifi	Amir Armani, Ken Youssefi	12/13_16:00-16:30	Structural Design and Fabrication of a Lower Extremity Exoskeleton Prototype
Chen, Kevin	Barez	Ernest Thurlow, Hussam Kabbani	12/13_8:30-9:00_IS108	Influence of Structural Parameters on Heat Pipe Thermal Management System for Cylindrical Battery Cells
Duong,Han Xuyen	Jiang	Winncy Du, Mojtaba Sharifi	12/13_11:30-12:00	DESIGN OF A FORCE-BASED IMPEDANCE CONTROLLER FOR A BILATERAL TELEOPERATION SYSTEM IN SOFT ENVIRONMENTS
Garmeni,Naga Sai Rahul	Kazemifar	Crystal Han, Ali Tohidi	12/19_10:30-11:00	Simultaneous Temperature Measurement of Immiscible Liquids in Microchannels using Laser Induced Fluorescence Therm
Horwege,Alex	Armani	Crystal Han, Ali Tohidi	12/07_19:00-19-30	Impact Response of Additively Manufactured Lattice Structures
Jayaprakash,Yashas	Armani	Feruza Amirkulova, Saeid Bashash	12/13_17:00-17:30	Closed-loop control of the Ceramic On-Demand Extrusion process using Machine learning algorithm
Johnson,Karl	Jiang	Saeid Bashash, Mojtaba Sharifi	12/13_11:00-11:30	Improving Infant Feeding Success Rate using an Artificial Intelligent controlled Oral Motor Training Tool
Juarez,Sergio	Barez	James Mokri, John Ren	12/11_14:00-14:30	Development of Advanced Driver Assist Systems Features in a Scaled Vehicle
Knesek,Zachary	Sharifi	Saeid Bashash, Burford Furman	12/11_11:00-11:30	Intelligent Control of Lower Limb Exoskeleton Utilizing Adaptive Central Pattern Generators and Reinforcement Learning With Divergent Components of Motion for Postural Stability
Luong,Eric	Du	Tamara Russ, Joseph Stetter	12/13 _12:15-12:45	Developing Sensor Compensation Techniques for Low-Cost Sensor Nodes to Detect and Combat Wildfires
Makwana,Harshal	Sharifi	Amir Armani, Raymond Yee	12/12 _15:30-16:00	Design, Integration, and Development of the Suspension and Motorized Rear Wheel Drive System for a New Robotic Walker
Martinez,Abraham	Armani	Raymond Yee, Eduardo Chan	12/07_19:30-20:00	Orientation Optimization of 3D Printed Superalloys via Finite Element Analysis
Nguyen,Andrew	Viswanathan	Bryan Asuncion, Amir Armani	12/08_16:00-16:30	Shutter Blade Curtain Redesign with 3D Printable Compliant Mechanism Methodologies
Nguyen,Anh Huy	Yee	Burford Furman, Crystal Han	12/08_13:00-13:30	Prototype Vest with Head Protection Airbag and Accelerometer-Based Fall Detection System for Senior Individuals with Balance Impairments
Patel,Miral_Patel	Armani	Eduardo Chan, Bryan Asuncion	12/08_19:00-19:30	Fatigue and Thermal Analysis for superalloys during selective laser melting
Penmetcha,Sumanth Phani Varma	Tohidi	Farzan Kazemifar, Ernest Thurlow	12/15_12:30-13:00	Numerical Modeling of Thermal Degradation of Biomass particles Using Multiphysics Simulation
Portillo,Perla	Sharifi	Raymond Yee, Amir Armani	12/12_16:00-16:30	Synergy Based Design Mechanism for Activating Movements on Three Groups of Fingers in Hand Exoskeleton
Rao,Ravada_Binni_Rosi_	Viswanathan	Amir Armani, Syed Zaidi	12/11_15:30-16:00	Enhancing Reliability of 3D-Printed Components Through Rigorous Fatigue Testing and Evaluation
Saeed, Salman	Jiang	Saeid Bashash, Mojtaba Sharifi	12/12_09:00-09:30	Tele-surgical Vision Precision: Computer Vision Enhanced End-Effector Manipulator
Schmidt,Troy	Sharifi	Saeid Bashash, Winncy Du	12/12_14:00-14:30	Control of Lower-Limb Exoskeleton Stability Using Reinforcement Learning and Ankle Strategy
Solorio,Karina	Bashash	Mojtaba Sharifi, Neyram Hemati	12/13_18:30-19:00	A Comparative Study of Controllers for Flexible, Non-minimum Phase Robotic Manipulators via Simulation and Experimentation
Traore,Aboubacar	Han	John Lee, Hussam Kabbani	12/13_10:00-10:30	Development of single particle loading device for ITP extraction of single-cell RNA and DNA
Truong,Andrew Dang Quy	Sharifi	Amir Armani, Raymond Yee	12/12_11:30-12:00	Design and Fabrication of an Upper Limb Exoskeleton for Shoulder and Elbow Assistance with Four Actuated DoFs
Urena,Javier	Bashash	Neyram Hemati, Mojtaba Sharifi	12/13_18:00-18:30	Energy Management of DC Microgrids with Maximum Power Point Tracking Control
Vanparia,Avadh	Sharifi	Saeid Bashash, Burford Furman	12/12_14:30-15:00	Motion Planning and Motor Control Using Image Processing and LiDAR Sensing for a Robotic Walker
Yuke,Kyle	Viswanathan	Raymond Yee, Yanika Schneider	12/12_19:30-20:00	Design and Fabrication of a 4-D Printer to Extrude Adaptive and Complex 3-D Models utilizing Smart Materials for Medical Applications

CLASS 299 I - FALL 2023

STUDENT NAME	Chair	Committee	Presentation Date and Time	THESIS
Qiu, Cheng	Amirkulova	Ali Tohidi, Ozgur Keles	12/15 9:00-10:00	Pentamode Metamaterial Design via Wave Stimulation and Machine Learning
Nguyen,John Derick	Amirkulova	Lin Jiang, Amir Armani	12/11_16:30-17:00	Effects of Infill Geometry and Infill Density on a Diffusion Optimized 3D-Printed Sound Diffuser