

CLASS 295B - Spring 2021 - 1 hour				
STUDENT NAME	Chair	Committee	ALL ZOOM Presentation Date and Time	PROJECT
Abbas, Anam	Amirkulova	Birsen Sirkecki, Ozgur Keles	05/21 9:00-10:00	Pentamode Matamaterial Design via Full Wave Simulation and Deep Learning
Behzad, Kiarash	Bashash	Fred Barez, Neyram Hemati	Not ready	Electric Vehicle Range Estimation Using Adaptive Data-Driven Methods
Bin Taleb, Omar	Amirkulova	Adam Svec, Shaum Bhagat	Not ready	Investigation of Human Directional Hearing in a Semi-Anechoic Environment
Chitani, Solomon Vivian	Barez	Neyram Hemati, Rushabh Desai	05/20 18:30-19:30	Design of Collision Avoidance System for Autonomous Vehicles
Escobar, William Allen	Barez	Alishba Imran, Saeid Bashash	5/20 14:00-15:00	Design of an Affordable 3D Printed Prosthetic Arm Equipped with Computer Vision
Ho I, Tan Viet	Barez	Faith Aybar, James Mokri	Not ready	Vehicle Lane Keeping and Departure Warning Assist using Surround Cameras
Grewal, Satwinder	Furman	Ernest Thurlow, Ken Youssefi	5/20, 1600-1700	Computational Fluid Dynamic study of a Podcar for an Automated Transit Network
Ilas, Colin	Furman	Saeid Bashash, Ron Swenson	Postponed to summer	Designing a Full-Scale Mechatronics System and Propulsion Control System for the Spartan Superway
Lau, Jeff	Barez	James Mokri, Rushabh Desai	5/18 2000-2100	Implementation of Machine Learning to Lane Keeping System
Laxamana, Neil Randall Salonga	Barez	Farzan Kazemifar, Ken Youssefi	5/20 1700-1800	Design of a Simple and Affordable Ventilator
Lopez, Alberto Jeovany	Yee	Vimal Viswanathan, Peter Woytowitz	5/20, 1830-1930	The Parametric Study of Selective Laser Melting Process for Stainless Steel 316
Moudy, Tyler Nicholas	Bashash	Winnycy Du, Burford Furman	Not ready	Design and Control of a Low-cost Smart Mechanical Ventilator
NgChie, Fernando	Furman	Feruzza Amirkolva, Saeid Bashash	5/21 1800-1900	Application of Machine Learning to Autonomous Disinfection of Personal Rapid Transit Vehicles
Patel, Akshat Mukeshbhai	Viswanathan	Amir Armani, Ken Youssefi	5/20 1000-1100	Design and Characterization of a Suspension System for a small scale hyperloop pod
Patel, Dhruvin Sureshbhai	Viswanathan	Amir Armani, Ken Youssefi	5/20 1100-1200	Propulsion of a desktop-size Hyperloop Capsule using Magnetic levitation
Peter, Christabelle	Okamoto	Mohamed Badawy, Vimal Viswanathan	Not ready	Reduction of thermal loss by converting into electricity in Hyperloop
Pham, Johnny	Barez	Armin Moghadam, Kiran Kumar	Not ready	Facial Recognition and Driver Awareness Detection
Ramayrat, Joshua	Bashash	Neyram Hemati, Teng Moh	Not ready	A Vision-Based Control System for Occluded Object Tracking
Semahegn, Samuel Haile	Okamoto	Igor Tyukhov, Ananda Mysore	5/18 12-1300	Laboratory Stands For Characteristics of Solar Cells, Solar Modules, and Learning the Principle of Photovoltaic (PV) Systems
Shah, Neel	Amirkulova	Saeid Bashash, Winnycy Du	05/20 from 15:30 to 16:30	Modeling and Optimization of 2D Volumetric Sound Diffusers
Singh, Hartej	Barez	Fatih Aybar, James Mokri	5/21 1730-1830 pm	Design of an RC Model Autonomous Vehicle for Driving and Parking
Wongpiya, Lattapol	Du	Saeid Bashash, Burford Furman	5/19 13:00-14:00	Haptic Glove with Active Force Feedback using Spring Force for VR Application and Remote Robotic Hand Control
Witala, Devan Maximo	Du	Nima Karimian, Vimal Viswanathan	05/21 14:30-15:30 (student arrgt)	PPG BIOMETRIC AUTHENTICATION CIRCUIT FOR PERSONALIZED FIREARM WITH SUICIDE PREVENTION
Wright, Ryan Kester	Bashash	John Lee, Faraz Minooei	05/19 14:00-15:00	A CONTROL MODEL FOR UPPER LIMB MOTION WHEN PLAYING PERCUSSION INSTRUMENTS Meeting link: https://jsju.zoom.us/j/99284311967?pwd=aXVNVW9BamZlWlRNNkZlS3RmMzJWdz09
Zhaoyi, Zeng	Bashash	Winnycy Du, Neyram Hemati	5/20 - 19:30-20:30	Design and Control of a Vision-based Object Tracking Ground Robot
Ziemann, Kevin A	Bashash	Winnycy Du, Burford Furman	5/21 13:00-14:00	Modeling and Position Seeking Control of a Rotary Flexible Structure
Cruz, Julio Ramos	Armani	Vimal Viswanathan, Raymond Yee	Not ready -	Optimal Design of Functionally Graded Ports for Additive Manufacturers
CLASS 295A - SPRING 2021 - 30 mn				
STUDENT NAME	Chair	Committee	Presentation Date and Time	PROJECT
Barbeiro, Jason Eugene	Furman	Michel Pharand, Farzan Kazemifar	5/21 09:30-10:00	Modeling and measuring K-prism air bearing motor assembly performance
Chau, Jeffrey	Yee	Eduardo Chan, Varun Mathur	05/18 20:00-20:30	Drone Design using layered carbon composite modelling
Choi, Nicholas	Bashash	Burford Furman, Neyram Hemati	5/18, 1800-1830	Development of a Teachable and Force Controlled Anthropomorphic End Effector through Video for Robotic Pick and Place Grasping Applications
Clark, Jacob	Viswanathan	Mahima Suresh, Ben Pourkaldani	05/19 13:00-13:30	AI-Based Extraction of Customer Needs for Product Design and Development
De La Rosa-Moreno, Amaris	Amirkulova	Saeid Bashash, Ehsan Khatami	not ready	Reinforcement Learning Models for the Active Control of Acoustic Waves Using Multipole Sources
Doan, Daniel	Barez	Vlad Ionescu, Ken Youssefi	5/18 1530-1600	Personalized Sound Control in Vehicle Cabin
Fong, Donald Clifford	Barez	Vlad Ionescu, James Mokri	5/18, 1500-1530	Creation of Personal Mobility Vehicle for Use in Urban Settings
He, Stanley	Viswanathan	Syed Zaidi, Matthew Leinewber	5/19 10:30-11:00	Control of a Robotic Knee Brace for Rehabilitation Based on Motion Intention from Surface Electromyography Signals
Janicki, Richard	Viswanathan	Kourosh Yousefi, Burford Furman	5/19 14-1430	Maximizing Range by addition of Multi-Speed Gearbox to Electric Vehicle
Kaur, Arsh	Yee	Amir Armani, Farzan Kazemifar	05/19 18:30-19:00	THERMAL ANALYSIS AND DESIGN OPTIMIZATION OF A COLLAPSIBLE CUP FOR HOT AND COLD BEVERAGES
Kiron, Nikhil	Viswanathan	Mahima Suresh, Edward Cydzik	5/19, 930-10	Case Study of Solid Product Dispenser with Specified Guidelines based on the Satisfaction of Customer Needs
Lee, Vincent	Bashash	Lijoong Youn, Burford Furman	05/18 14:00-14:30	Design and Control of Tripod Platform with Isolation from Base Motion
Maran, Tais Tolino	Barez	Eduardo Chan, Saeid Bashash	05/18 18:30-19:00	Design of a Personal Health Monitoring System
Murphy, Jessica	Barez	Eduardo Chan, Saeid Bashash	05/18 19:30-20:00	Designing and Prototyping a Self-Contained Health Monitoring Solution for Use in Patient Homes
Navas, Steven	Kazemifar	Crystal Han, John Lee	5/21, 09:30-10:00	Design, fabrication and testing of a microfluidic chip holder with embedded heating and cooling elements for high-pressure applications
Patel, Akshaykumar Ghanshyambhai	Viswanathan	Ozgur Keles, Peter Woytowitz	5/18, 18-1830	High Accuracy in 3D printed parts in fused deposition modeling with induced vibrations.
Purewal, Sukhjap	Barez	Ernie Thurlow, Younes Shabany	not ready	Numerical Study on Cooling Plate Channels and Splitter Configurations for EV Batteries
Shah, Harshit	Viswanathan	Saeid Bashash, Syed Zaidi	5/21 17:30 -18:00	Development of automated actuating electronic brake system for carbon brush mounted bicycle
Shetty, Sahil	Barez	Feruzza Amirkulova, Vlad Ionescu	5/18 1600-1630	Active noise cancellation system to reduce vehicle in-cabin noise using required mechatronics instrumentation
Stone, Gabriel Paul Joseph	Yee	Amir Armani, Burford Furman	5/19 1500-1530	PARAMETRIC STUDY TO PRODUCE AS-PRINTED Ti6Al4V WITH SIMILAR YIELD AND TENSILE STRENGTHS AS WROUGHT ALLOY
Tran, Nhi	Barez	Vlad Ionescu, James Mokri	5/18 1630-1700	Chassis Design of a Personal Mobility Vehicle for Urban Transport
Vasquez, Geraldine	Han	John Lee, Hussameddine Kabbani	05/19 13:00-13:30	Multiphysics Simulation of Isotachopheresis to Predict Sample Accumulation Rate and Processing Time
Wasi, Asad	Barez	Ken Youssefi, Vlad Ionescu	05/18 10:00-10:30	Design and Optimization of an Automated Ramp for Autonomous Vehicles
Wong, Westley Kin	Du	Saeid Bashash, Susan Bowley	5/18 1130-12	Development of a System Dynamics Model for Osteogenic Loading in the Human Femur
Yim, Cheuk Kwan	Barez	James Mokri, Kourosh Youssefi	not ready	Design of a Sustainable Personal Mobility Transport System
CLASS 299 I/II - SPRING 2021 -				
STUDENT NAME	Chair	Committee		THESIS
Kieger, Ty Clapton	Kazemifar	Nicole Okamoto, John Lee	05/21 10:00-10:30	Computational Analysis of Changing Wavelength and Amplitude Effect on Bottom Rib and Side Rib Wavy Microchannel Heat Sinks
Lai, Peter Chien-Chern	Amirkulova	Birsen Sirkeci, Yupeng Wei	Not ready	Deep Learning Assisted Metacluster Design for Acoustic Wave Manipulation
Maiden, Nicholas Christian	Bashash	Kathryn Gosselin, Vimal Viswanathan	Not ready	Combustion Exhaust Emissions Reduction through Active Control of Catalytic Converter Position
Zhuo, Linwei	Amirkulova	Birsen Sirkeci, Teng Moh	5/19, 11-1130	Design of Metamaterials Using Deep Learning, Reinforcement Learning, and Generative Modeling