

WELCOME TO
ECE DEPARTMENT CAPSTONE SHOWCASE DAY 2023-2024
Tuesday, April 23, 2024; 10am-2pm @ CS Building 4th Floor

	Poster Title	Student Name	Faculty Mentor	Project Type / Sponsor/
1	Smart Baby Room with Monitoring System	Logan Chenworth, Hunter Johnson	Dr. Minaie	Capstone /ECE Funded
2	Wireless Fencing with Capacitive Touch Sensors	Victor Galayda, Andrew Butler	Dr. Minaie	Capstone /ECE Funded
3	Bluetooth Steering Wheel for Simulation & RC Control	Aidan Young, Jeremiah Engel	Dr. Minaie	Capstone /ECE Funded
4	Guitar Effects Pedal using Chorus Modulation	Colton Seegmiller	Dr. Minaie	Capstone /ECE Funded
5	Water Quality Monitoring	David Horne, Logan Stranc	Dr. Minaie	Capstone /ECE Funded
6	Increasing Digital Accessibility for the Blind	Christian Poulsen, Zachary Ward	Dr. Minaie	Capstone /ECE Funded
7	Weight Sensing Insole	Benjamin Heaton, Brayden Harding	Dr. Ahmadi	Capstone /ECE Funded
8	Hand Gesture Music Conducting System	Brent Watson, Dylan De Hoyos	Dr. Ahmadi	Capstone /ECE Funded
9	Beyond Boundaries: LiDAR and Depth Camera Fusion in Remote Ground Navigation	Kyler Draper	Dr. Rohani	Capstone /ECE Funded
10	Simulated G-Force on a Stationary Platform	Esteban Oman	Dr. Rohani	Capstone /ECE Funded
11	Single Pixel Camera	Alex Young, Cole Alldredge	Dr. Shekaramiz	Capstone /NSF Funded
12	Wireless Charging Dock for Drones	Lalle N'diaye, Brennen Barfuss	Dr. Masoum Dr. Shekaramiz Dr. Rohani	Capstone /USHE Funded
13	Autonomous Wind Turbine Inspection Using DJI Matrice 300 RTK Drone and AI Path Planning	Joshua Zander, Angel Rodriguez	Dr. Shekaramiz Dr. Masoum	Capstone /USHE Funded
14	Wind Turbine Fault Localization Using Deep Learning	Mason Davis, Edwin Nazario	Dr. Shekaramiz Dr. Masoum	Capstone /USHE Funded
15	Aqua Feast	Nathan Silva, Kaden Clements	Dr. Rohani	Course Project /ECE Funded
16	Ball Balancing Game	Colin Nguyen, Sunshin Jo, Esteban Mendoza	Dr. Rohani	Course Project /ECE Funded
17	Anemometer Wireless Communication for Matrice 300RTK	Benjamin Collier	Dr. Shekaramiz	Industry Project /USHE Funded
18	UVU's Mobile Solar-Wind Drone-Based Workstation: System Design via Homer Pro and Implementation	James Moos, Christopher Huntington	Dr. Masoum Dr. Shekaramiz	Industry Project /PacifiCorp Funded
19	UVU's Mobile Solar-Wind Drone-Based Workstation: Simulation via MATLAB Simulink	Christopher Huntington, James Moos	Dr. Shekaramiz Dr. Masoum	Industry Project /PacifiCorp Funded
20	An Automated Drone-Based System with AI Training for Online Condition Monitoring, Fault Diagnosis, and Reliability Prediction of Wind Turbine Blades	Project Outcome Demonstration by Electrical Engineering and Computer Engineering Students	Dr. Shekaramiz Dr. Masoum	Applied Project /USHE Funded