SEMET Technical Project Showcase - Winter 2024

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The following electronics, computer engineering, and electromechanical automation projects are anticipated to be shown at the SEMET Technical Project Showcase on Thursday, April 18, 2024.

- See photos from the event.

TPJ452: EEN Program

- See photos from the EEN groups.

R01. IoT Smart Energy Meter

R02. Motion Alert Monitoring System

R03. ESP32-Based Driver Safety System with Enhanced Features

R04. Intelligent Parking Information System with ESP32

R05. Numberpad and Facial Recognition Door Lock

R06. Touchless Can with IoT

R07. IoT Indoor Air Quality Monitoring Device

TPJ655: Joint EET & ECT Programs

- See photos from the EET & ECT groups.

H01. Smart Pet Feeder with Health Monitoring

H02. Trash Trekker

H03. Intelli-Desk: Workspace Buddy

H04. Acceleron: Puppetry in Motion with IoT

H05. IQ-Leaf: Smart Home Irrigation System

H06. Paranormal Pulse Ghost-Hunting Kit

H07. Time Rouse Pro Max: A Smart Alarm

H08. Tic-Tac-Toe: AI vs. Humans

H09. Smart Luggage Helper

H10. Kitchen Productivity Gadget

H11. Smart Health Monitor for Eldercare

T01. Two-factor Authentication System

T02. Safe Drive Guardian System

T03. Warehouse Inventory Management System

TPJ653: EMA Program

- See photos from the EMA groups.

M01. Industrial Sorting Sensor

M02. Automated Safety Fence

M03. Automated Liquid Intelligent Containing Environment

M04. Automated Crayon Packaging

M05. Automated Colour Mixer

M06. Eco-Vent Window

M07. Jar Capping and Sorting Station

M08. Automated Water Bottle Filling and Capping Station

M09. Scara Robot 4DOF

M10. PrecisionCraftDrill

M11. Manufacturing Parts Vending Machine

What is TPJ?

"TPJ" is the Thesis Project (or capstone project) course in each of the final semesters of our EEN, EET, ECT, and EMA programs. Each student project team above spent 12 weeks researching, designing, and constructing a working capstone project, with guidance from their respective TPJ professors:

Jason Wang (452), Karen Craigs (655), Ben Shefler (655), and Fabio Costa (653).