

SenecaTechSparks: Applied Technology Design Showcase - Fall 2025

Version 7

Published 10/21/2025 by [Fabio Pricinato Costa](#) Last updated 2/9/2026 5:48 PM by [Fabio Pricinato Costa](#)

TPJ452: EEN Program

[V01. Smart Blinds and Monitoring Routine Controller](#) - Berkay K.

[V02. Automated Garbage Bin with LCD](#) - Jawad C.

[V03. Automatic Car Wash System](#) - Abdullah F., Baswil H.

TPJ655: Joint EET & ECT Programs

[E01. P.A.W.S. - Patient Alert & Wellness System](#) - Krish S., Smit P.

[E02. The Doomsday Arcade](#) - Tara K., Medya K.

[E03. AutoSolder - Intelligent PCB Soldering](#) - Jeffrey L., Mahima A.

[E04. BrailleLive - Portable Live Text-to-Braille Convertor](#) - Pradeep B., Mansi

[E05. BloomX - Personal Task Manager](#) - Danielle R., Priya P.

[E06. GridAttack - A Tabletop Arcade Game](#) - Matthew P., Jiachang T.

[E07. LifeLoop Tester - Automated Cable Testing System](#) - Shubham S., Dhruv J.

[E08. A.T.O.M. - Autonomous Terrain & Operations Monitor](#) - Priya P., Prince H.

[E09. GuardianBand - A Pediatric Health Companion Bracelet](#) - Misha I., Mohammad A.

[E10. AuraVision - Assistive Glasses for Enhanced Navigation](#) - Aavash G., Aayush S.

[E11. Quiet Watch Baby Monitor](#) - Mohammed Y., Joel O.

[E12. VitaClip Pro - A Modular Smart Assistant for Marine Technicians](#) - Gregory A.

[E13. Search and Rescue Helmet \(SARion\)](#) - Timothy B., Daniel F.

[E14. BlushCloud - Personal Productivity Assistant](#) - Ashna B., Gianna R.

[E15. Bio-Sense Health Monitor](#) - Kamil D.,Hermes S.

[E16. Zoomie Box - A Moving Trash Can Game](#) - Karandeep S., Lovepreet S.

E17. **Autonomous Communicative Robot Swarm** - Chinonso A., Baochen X.

E18. **Nova - An AI Mobile Robot** - Saket C., Hemant V.

E19. **CareBunny - Personal Health Monitoring Assistant** - Nujhat C., MD Ashraful B.

E20. **Smart Hydration & Break Reminder Device** - Dang P., Tran N.

E21. **P.L.A.M. - Plantar LiDAR Analysis & Measurement** - Khin C., Karan B.

TPJ653: EMA Program

J01. **QR Code-Based Automated Shelf Management System** - Van N., Zachary B.

J02. **FCS System (Filling, Capping, Sorting)** - Harpreet S., Zahra M.

J03. **Battery Quality Control System** - Lynden A., Tenzin D.

J04. **Mini Automated Storage and Retrieval System (M-AS/RS) with a Conveyor Belt 3D Printer** - Christopher F., Zeevy M.

J05. **Automated Height Sorting System** - Ethan H., Jason L.

J06. **Automatic Seeder for Urban Planting** - Ivan D., Kevin A.

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:

Benjamin Shefler (452), Karen Craigs (655), and Iakov Romanovski (653).