Battery ReLife: Advancing Second-Life Solutions for Lithium-Ion Batteries

Project Overview: Introducing a groundbreaking device designed to assess and repurpose aged lithium-ion batteries, making renewable energy storage more accessible and affordable.

Innovation Highlights

- **Portable Assessment Device:** Assesses SOH (State of Health) and SOC (State of Charge) in 6 minutes at an affordable cost.
- **Major Innovations:** Utilizes advanced deep learning techniques for precise health estimation and introduces a novel prognostic framework for battery life prediction.

Impact & Value Proposition

- **Environmental Impact:** Reduces electronic waste by extending battery life, supporting renewable energy storage solutions.
- **Community Engagement:** Plans for community workshops and green tech job creation, focusing on underserved communities.
- **Economic Benefit:** Makes second-life batteries a cost-effective solution for energy storage, with significant savings over new batteries.



Team & Achievements

- **Team Expertise:** Led by industry and academic experts with a track record of innovation and award-winning projects.
- Key Achievements: Semifinalist in the American-Made Solar Prize, First Place in the American-Made Net Load Forecasting Prize, and more.

Future Plans

- **Goals:** To commercialize our device by 2026, enabling widespread battery repurposing and supporting global sustainability efforts.
- **Metrics of Success:** Achieve under 1% estimation error, reduce assessment time to 6 minutes, and ensure device affordability at \$100.