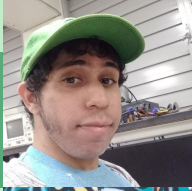


Trolley Mesh Network

Fire Thunderstorm Axe

Angel Garcia



Leader

Victor Hernández



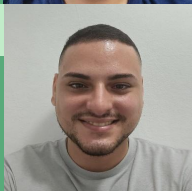
Designer

Angel Maldonado

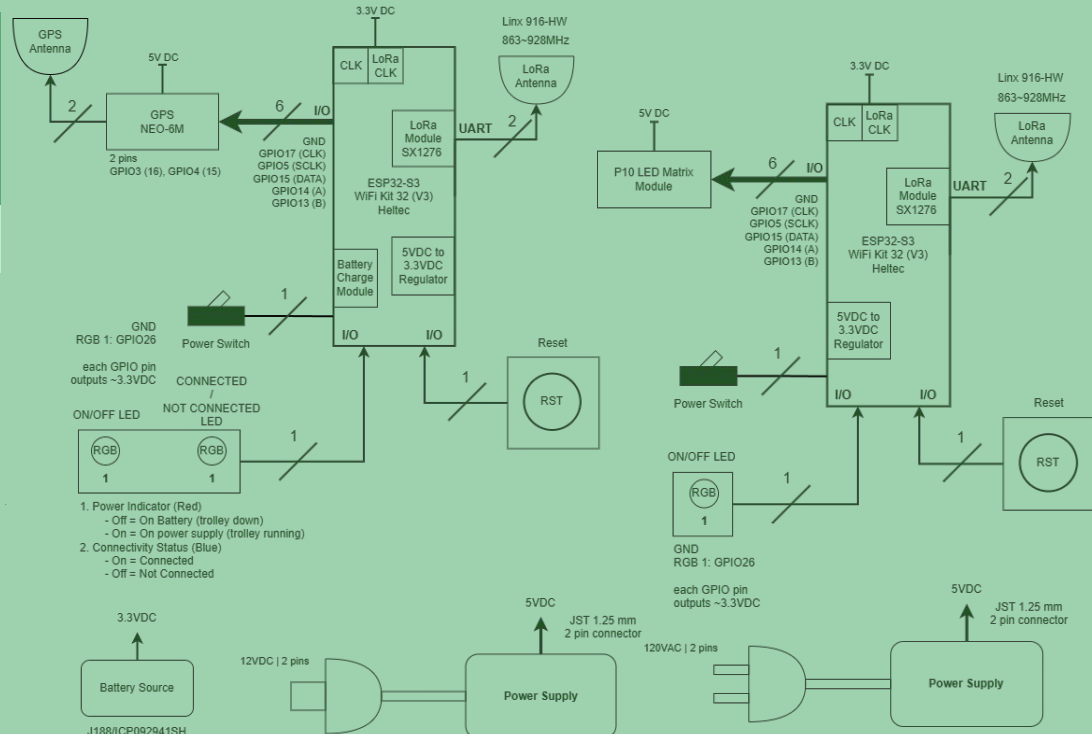


Integrator

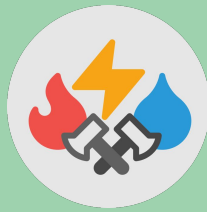
Jan Cruz



Designer



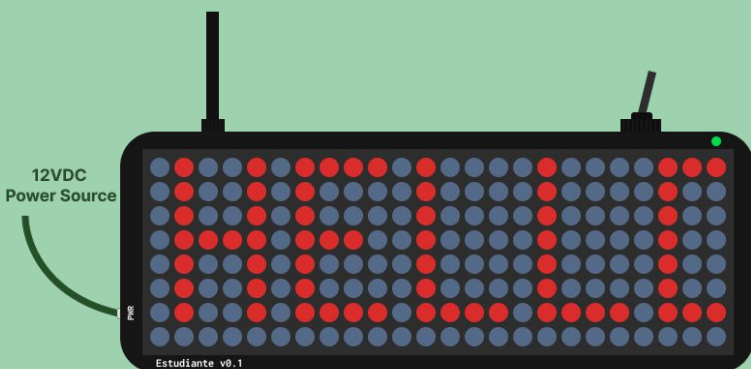
Block Diagrams of trolley module (left) and main station module (right)



Public transportation is a critical component to societal infrastructure, yet its reliability falls short, leading to significant inconveniences to townspeople. These include extended waiting times, sometimes more than an hour, lack of information of trolley routes nor maintenance times and others. In response, a solution using a mesh network of ESP32s using the LoRa protocol in each trolley and station is suggested as a viable solution.

With a few strategically located stations, this system allows residents to obtain accurate, up-to-date information on trolley locations, thereby significantly reducing waiting periods and improving the service's overall efficiency and reliability.

Hooked up in a Trolley Station



Inside the Trolley

