WAYNE STATE
College of Engineering

Shoe Car

Watch videos & more @
shoecar.net

Sec. 8, Team 3: Jesse Naser, Ryan Cowells, Zion Carroll, Alex Badr   Professor Lenn

Problem ➤ Solution ➤ Accomplishments

Our BE 1200 amusement park needs **transportation** for users to travel to attractions faster than on foot and reduce congestion.

Design a shoe car with eight wheels for both mini-riders and humans.

RC Mode: Bluetooth phone controls car carrying mini-riders.

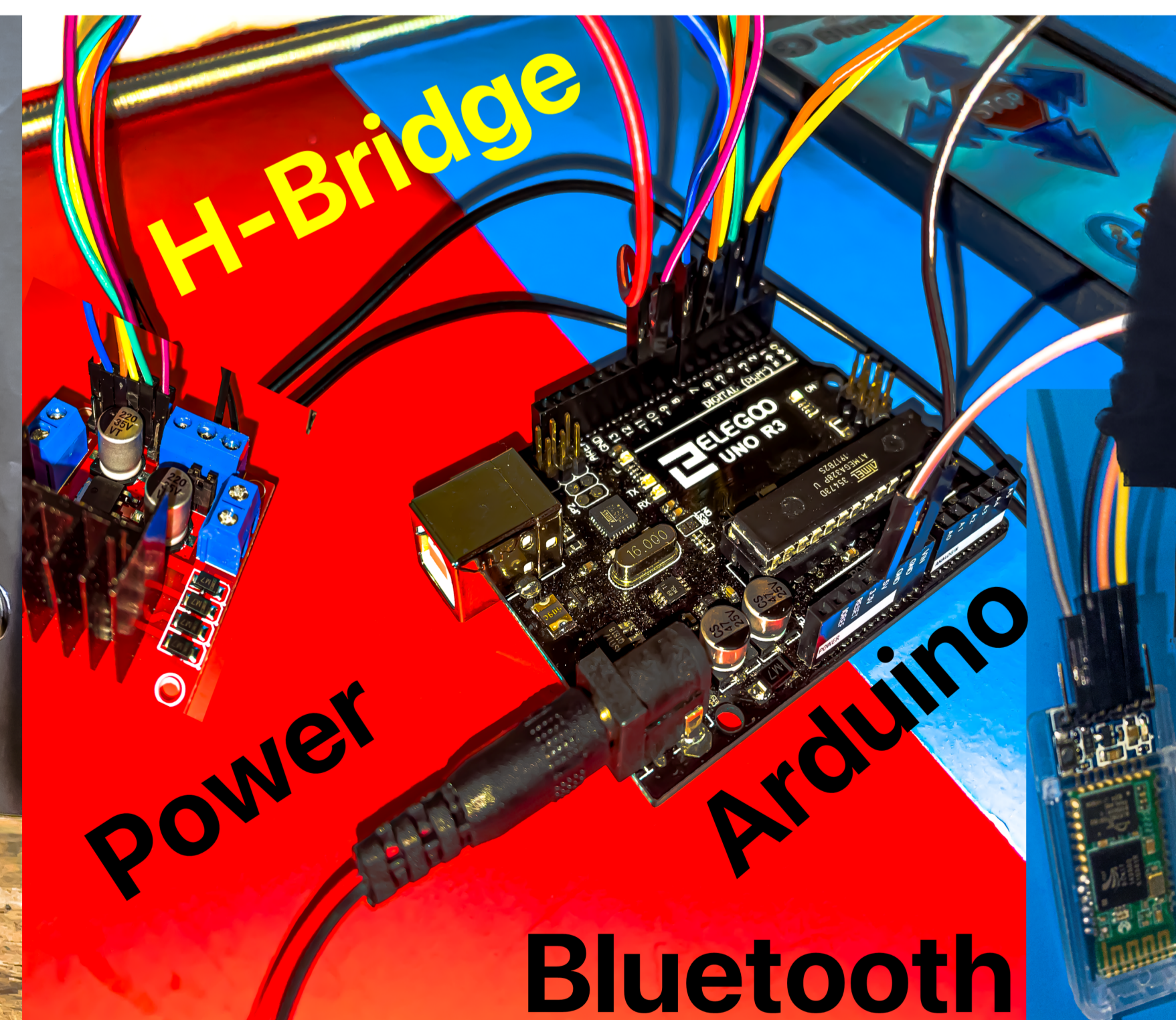**Skate Mode:** Car unfolds to become roller-skate for humans.

It Works!

Safe: Supported by durable metal rods
Eco-friendly: Electrically Powered
Fuel Efficient: Lightweight
Designed the body using NX.
Learned Arduino and Motor Control Fundamentals.

Skate Mode   Electronics   RC Mode

Unfolded

H-Bridge
Power
Arduino
Bluetooth
Supports Human Weight!

Folded