BrownSpoof: Unlock Brown University, No Swipe Required!

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What Is BrownSpoof?

Forget swiping your Brown ID every time you need to eat, study, or enter a building. **BrownSpoof** is the future of convenience. It's a portable device that wirelessly emulates your magnetic stripe ID, letting you access dining halls, dorms, and buildings without pulling your card out. It's like having a magic wand for campus life!!!

Why It's Perfect for Brown Students:

- **Save Time**: No more fumbling for your ID while juggling a coffee and laptop. Just press a button and go.
- **Hands-Free Access**: Heading into the library or grabbing food at the Ratty has never been easier.
- **Impress Your Friends**: Because who doesn't want to be the person who walks up to a vending machine, waves their device, and walks away with snacks?
- **Multi-Card Storage**: Switch between your Brown ID, hotel room key, or other magstripe cards instantly.
- **Campus-Wide Compatibility**: Works on all standard Brown magstripe readers, from dining halls to dorms.

Functionality:

1. **Sync**: Press Button 1 to fetch your card data.
2. **Select**: Use Button 2 to pick your stored card.
3. **Beam**: Press Button 3 and hold near any reader.

Microcontroller: Arduino Uno R4 WiFi

Power Supply: 9v Battery or USB-C Power (**Portable!**)

Driver: L293D H-Bridge to drive the electromagnetic coil

Interface: 3 Buttons (Fetch, Select, Play) + LED Matrix Display