

A wind-resistant umbrella with a pull-powered spin motor that flings the rain off its canopy — so you step indoors dry, and it survives Hong Kong's harshest weather.

Problem I Observed

In Hong Kong, sudden storms and strong gusts destroy ordinary umbrellas — ribs snap and the canopy flips inside-out during typhoons. And even when an umbrella survives the rain, it keeps dripping the moment you walk inside, soaking floors, lifts, bags, and shoes. Everyday umbrellas are designed for light drizzle, not for this city's weather.

The Product — Three Core Mechanisms

- **Pull-powered spin motor** — Charge it like a pull-back toy car: a quick pull winds a spring motor. Releasing it spins the canopy fast, and centrifugal force throws the water droplets off the fabric — the umbrella dries in seconds so it stops dripping indoors.
- **Flip-proof canopy** — A vented, double-layer design lets strong gusts pass straight through instead of catching and inverting the umbrella.
- **Reinforced frame** — Heavy-duty ribs and joints engineered to take typhoon-force winds without bending or snapping.

Who It Is For

Commuters, students, and anyone in a wet, windy, typhoon-prone city who is tired of broken umbrellas and dripping floors.

Next Steps

- Sketch and prototype the pull-motor spin mechanism.
- Test the flip-proof vented canopy in strong wind.
- Connect this product URL to a QR code and NFC tag.