GLOW GUARD
BRIGHTEN, ALERT, PROTECT

Raghav Karthick

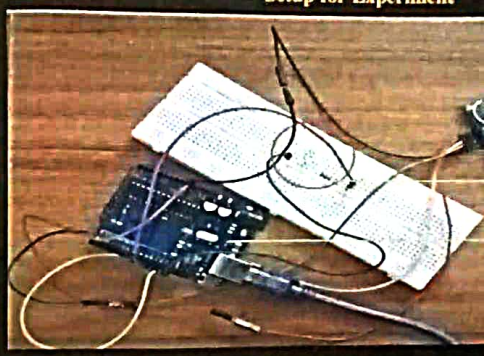
Before Glow guard

A man bumps into a clear glass and gets injured

After Glow Guard

A green colour pattern is seen when the man comes near clear glass. Glow Guard thus saves Man from colliding with glass.

Setup for Experiment



Glow Guard in Action

UV LEDs light up when an obstacle is detected. This illuminates th the green-coloured pattern on the g

I HAVE always been in awe of skyscrapers. Tall glass structures rise into the sky and reflect the city around them. What a modern architectural marvel! But these stunning structures can also pose a significant hazard to birds. Millions of birds die every year because they cannot differentiate reflective surfaces from their surroundings.

Glass structures pose a risk not only to birds but also to humans. People frequently walk into glass doors because they are so clear and seamless. From minor bruises to severe concussions/fractures, the risks range wide. Not many weeks ago, I walked into a glass door myself. Fortunately, I got away with a small head bump.

I was complaining to myself about how there should be a sensory buzzer/alarm that would go off every time someone came too close. Hmm. No, that wouldn't work. Imagine what a noise commotion that would cause in a crowded shopping centre with glass doors. So, what else can be done? Should we use some visible stickers on them? Yes, but that would spoil the look of the doors.

A few days later, a friend gifted me an invisible pen. It used a special ink that was visible only under UV (Ultraviolet)