**Goal**
Enable infants with Cerebral Palsy (CP) to independently explore their environment, while positioned in a simulated crawling position.

**Background**
- CP impairs the control of movement due to non-progressive and permanent damage to the brain
- 2 out of 1000 children are affected
- Without crawling, a child can develop sensory processing problems
- From crawling, the infant becomes stronger, learns the surroundings, improves visual skills and improves physical abilities.

**The Crawler**
- Controlled with an Arduino:
  - Inertial Measurement Unit (IMU)
  - Barometric Pressure Sensor
  - Capacitive Touch Sensor
  - DC Motors
- Steering and propulsion from the rear wheels
- Front caster wheels
- Contoured platform for natural crawling position
- Designed around safety for an infant

**Controls**
- **Steering**
  - IMU
  - Platform is mounted on a shaft and springs
  - Allows the infant to lean to control the steering
- **Propulsion**
  - Barometric Sensor
  - Detects Lower Body Motion
  - Air Bags are pressed
  - Change in pressure actuates the motors
  - Capacitive Touch Sensor
  - Detects hand motion
  - The infant swipes on the touch pad
  - The direction of the swipe actuates the motors accordingly