# THE INTERCEPTOR

#### CLEARING THE WAY FOR A SAFER TOMORROW

# THE IDEA

- Shops/construction sites are littered with NAILS, BOLTS, ETC.
- HEALTH AND SAFETY HAZARD
- LOST PRODUCT
- LOSS OF PRODUCTIVITY

### HOW DOES IT WORK?

- Utilizes six legs to traverse the diverse landscapes of shops/construction sites
- CONTAINS AN ELECTROMAGNET TO DRAW NAILS, BOLTS, ETC.
  FROM THE GROUND
- PROGRAM A DESIGNATED DROP-OFF POINT FOR DISBURSEMENT OF GATHERED MATERIAL
  - CAN BE PROGRAMMED TO RETURN TO A CHARGING BASE
    UPON JOB COMPLETION

# WHY THISS

#### THE INTERCEPTOR

- Can traverse unlevel terrain
- ONLY PICKS UP METAL OBJECTS
- CREATES A SAFER ENVIRONMENT
- LOOKS COOLER

#### Roomba

- CAN ONLY RUN ON FLAT SURFACES
  - NO STAIRS OR ROCKS FOR THIS
    GUY
- Would fill with dirt immediately
- So bad at its job, has to moonlight as a DJ

# COST ANALYSIS

- PROTOTYPE COST MODEL COST • •
  - BALSA WOOD \$22.75
  - MOTORS \$11.95 ٠
  - GLUE \$12.50 ۲
  - **JOINTS \$5.50** ٠
  - ARDUINO \$7.25 •
- TOTAL = \$59.95

- BODY
  - TITANIUM \$170 •
- LEGS
  - CARBON FIBER \$62 •
- JOINTS \$10 ٠
- MOTORS \$97 ۲
- ARDUINO \$20 ٠

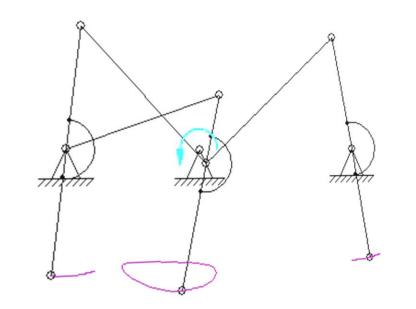
- TOTAL PRODUCTION COST \$359
- EXPECTED PROFIT PER UNIT • \$141
- COST TO CONSUMER ٠ \$500

#### THE MOVEMENT

Six legs provide a stable platform

MOVEMENT IS FLUID

MINIMAL TORQUE REQUIRED TO MOVE CRANK



# QUESTIONS?