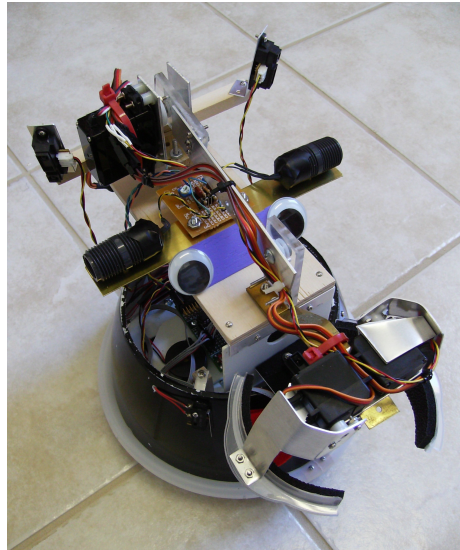


# PINCHY

## RoboWaiter 2009

by  
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### Brain

- Acroname BrainStem GP 2.0 microcontroller
- Program contains 600 lines of C/TEA code (2 threads)

### Power

- 7.2V 3600mAH NiMH battery pack
- Compatible with off-the-shelf RC quick chargers

### Locomotion

- 2 servos modified for continuous rotation
- Omni-directional wheel as caster

### Arm

- 1 heavy duty metal-gear servo controls elbow
- 1 standard micro servo controls claw
- Foam-lined claws provide firm grip on plate
- Round claws compensate for alignment errors at pick-up

### Navigation

- 1 SRF08 sonar for front obstacle detection
- 2 GP2D12 IR range finders for wall-following
- 1 GP2D120 for table edge detection
- 1 CMPS03 compass for turn measurement
- 2 phototransistor circuits for beacon detection