

BUILDING A ROBOT

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WHAT IS A ROBOT?

- ✦ A ROBOT IS NOT A MACHINE.
- ✦ A MACHINE IS A DEVICE THAT NEEDS OUTSIDE HELP FOR IT TO WORK.
- ✦ A ROBOT IS A MACHINE THAT DOES NOT NEED ANY KIND OF OUTSIDE HELP TO WORK.

MY ROBOT, ACMP



BEFORE



AFTER

MY MENTORS



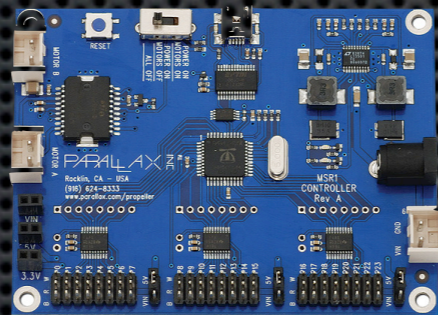
GREG WEAVER



MIKE LORD

Parts of the Robot

- Structure
- Microcontroller
- Sensors
- Motors
- Program
- LED's



```
CON
_clkmode = xtal1 + pll16x
_xinfreq = 5_000_000
```

```
VAR
long SensorDist[4]
byte obstacle
```

```
OBJ
motor : "SRMotorControl"
ping : "Ping"
sensors : "MaxSonar"
servo : "Servo32v7"
```

```
PUB Main
motor.Start
motor.SetRamp(5)
repeat 1
motor.MoveForward(40)
CheckSensors
AnalyzeData
if obstacle == 0

elseif obstacle == 1
Left
elseif obstacle == 2
Center
elseif obstacle == 3
Right
elseif obstacle == 4
```

DEMONSTRATION

OF

ACMP

(AUTONOMOUSLY CONTROLLED MOBILITY PLATFORM)

THE PROCESS

IDEA



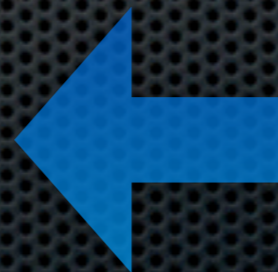
DESIGN



BUILDING



PROGRAMMING



THE FINISHED PRODUCT

THANK YOU'S

MY FAMILY

MY TWO MENTORS:

**GREG WEAVER
AND MIKE LORD**

**TAP PLASTICS
AND DON CONARD**

GOOGLE

PARALLAX