

Course Goals: Interdisciplinary Team

Name: Kyson Montague

Major: ECE

Our priorities: multidisciplinary teams; your preferences; personality match

People In Class you want to work with (Name AND Major, pick up to 3):

Please note that groups will be assigned in teams of 3 based on your choices, major, expertise and not guaranteed to be on your list.

Jon Dallas ECE

Robert Williams ME

How strongly you feel about it, and why:

I've worked with Jon a bit in the past and he is an excellent resource to have for hardware/embedded development.

Robert has experience in the machine shop and seems to be quite motivated to get the project moving

Your expertise is in (code, building things, circuits):

code & circuits mostly (embedded design especially)

Built Projects Before (give examples): ☒ YES ☐ NO

Several electrical projects for class, some hobby projects, tekbot, etc.

Access to MIME machine shop? ☐ YES ☒ NO

Programming Languages You know (C, C++, Java, Matlab, etc):

C/C++, Java, Python, Bash, AVRASM, some Verilog, Matlab, Perl

Familiar with microcontrollers:

Definitely. mostly AVR, very comfortable using all 8bit Tiny, mega & AT90USB series parts

Have you soldered/wired circuits before? ☒ YES ☐ NO

Tons of stuff for class (PCB & protoboard)

What Sensors have you used before?(IR, Accelerometer, Gyro, etc):

IR, Accelerometer, current, temp, anything w/ ADC

You most want to learn about:

Embedded control systems (interfacing a computer to motors, actuators, servos, etc)
Computer vision targeting/tracking systems

Initial Design INCLUDES THE FOLLOWING COMPONENTS:

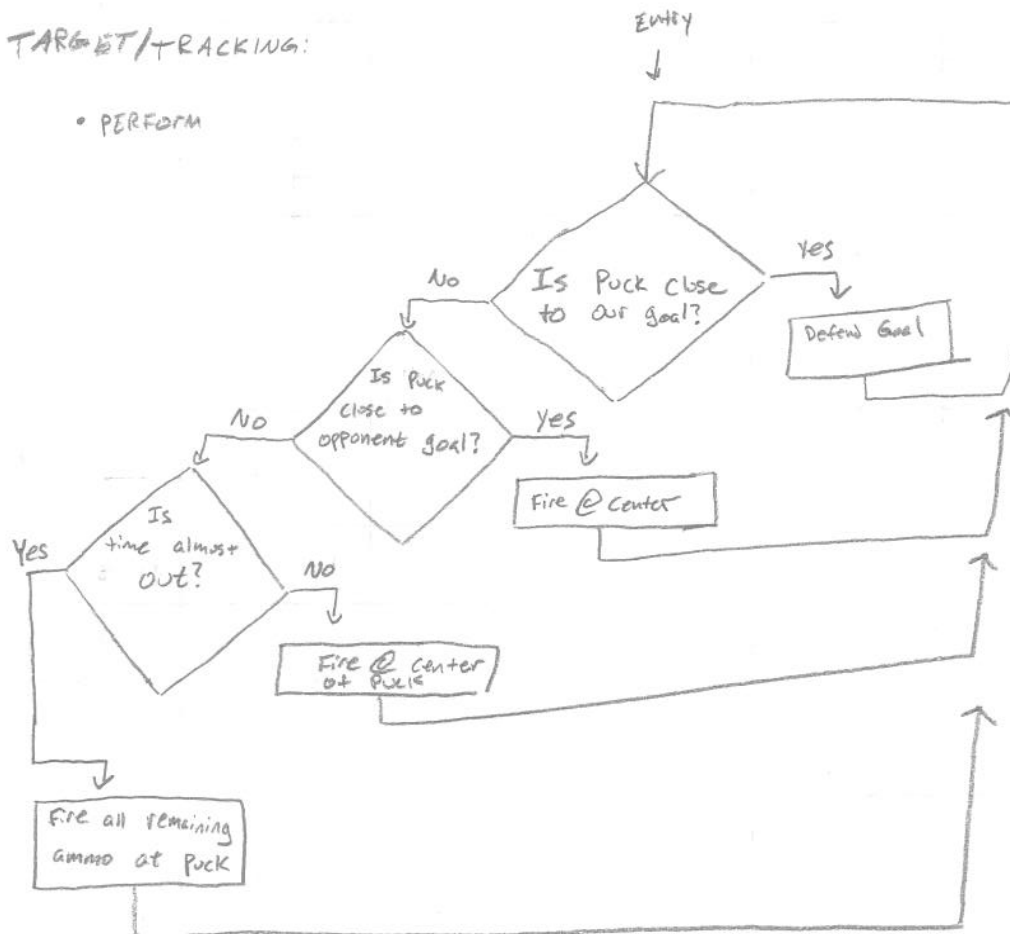
TARGETING / TRACKING MECHANISM (SENSE)

GAME DECISION ENGINE (THINK)

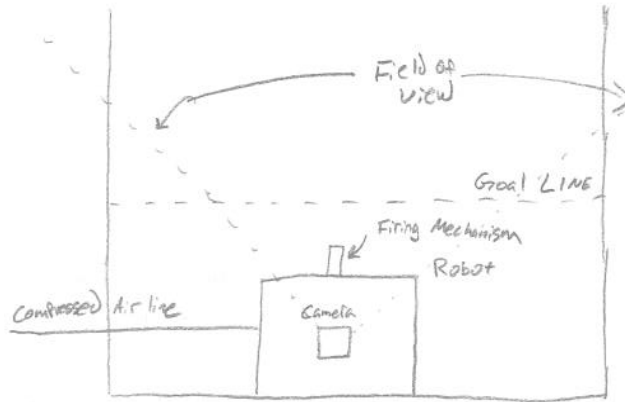
PROJECTILE AIM & FIRE (ACT)

TARGET/TRACKING:

- PERFORM



TOP:



Side:

