



Simplest AI Trick in the Book

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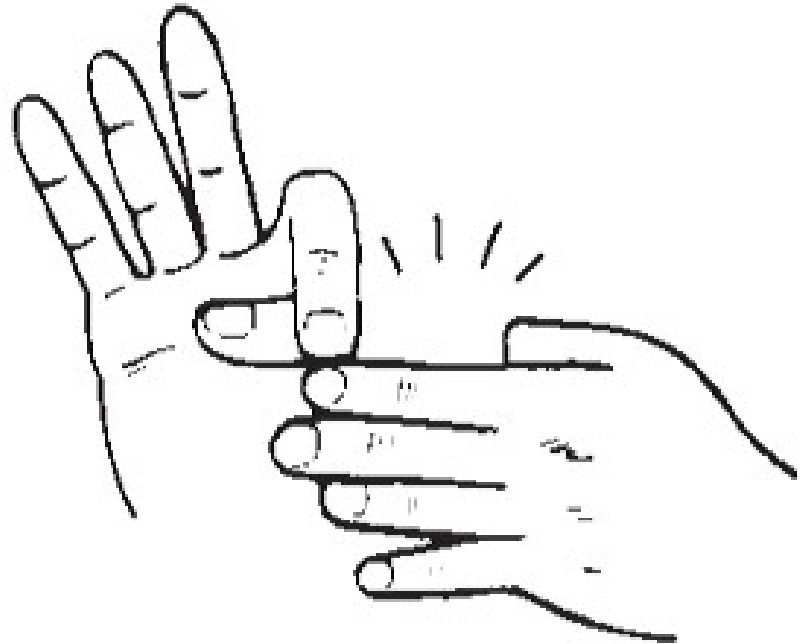
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Two Tricks





Trick #1

Agent Reaction Time



Agent Reaction Time

- AI sees the player...
- How long before the AI reacts?
- Somewhere between 0 and 1 seconds...
- Quarter of a second? Half a second?

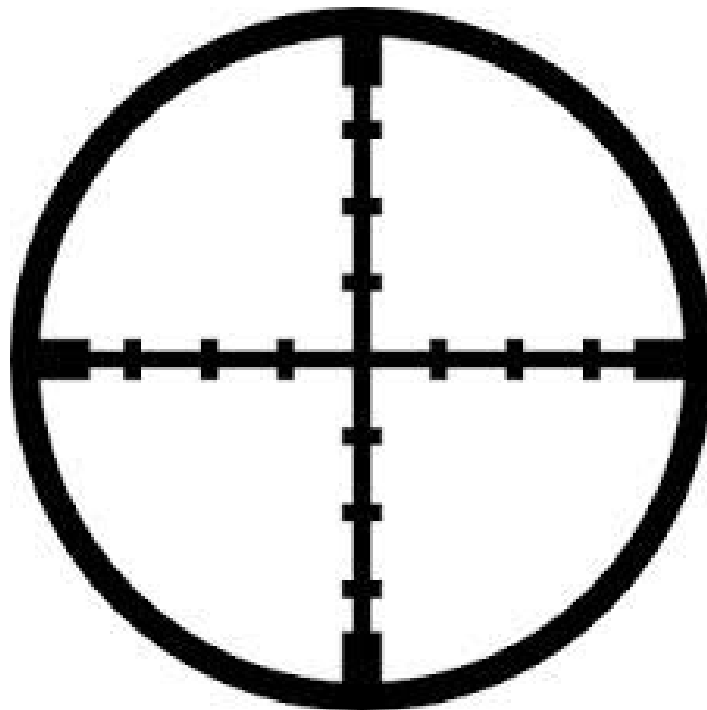


FOR NEUROSCIENCE!





Simple Reaction Time





Simple Reaction Time

0.2 seconds

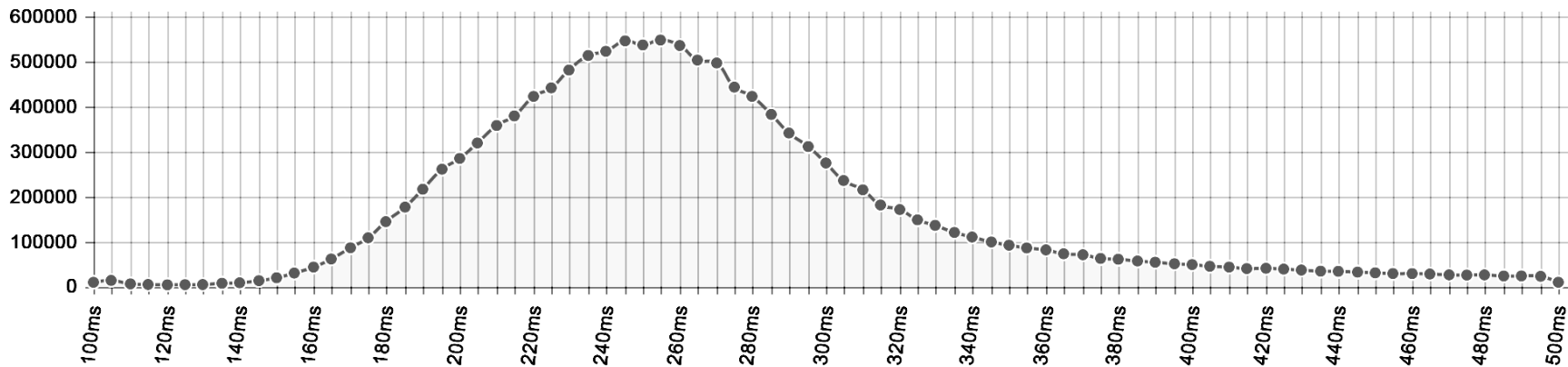


14,736,176 clicks

0.250s median reaction time

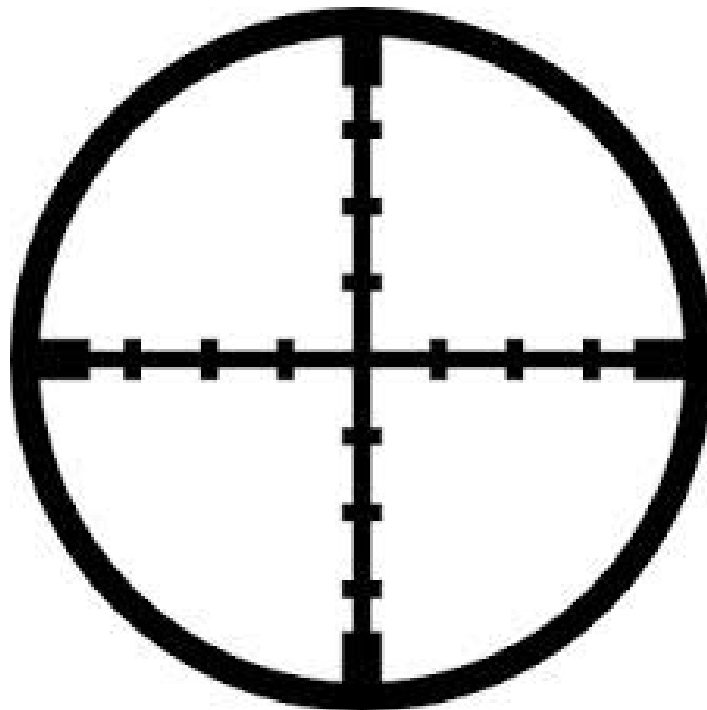
<http://www.humanbenchmark.com/>

All-time





Go / No Go Reaction Time





Go / No Go Reaction Time

0.4 seconds



It's always worse...

- Add more time for:
 - Distracted
 - Hard to identify stimuli
 - Complex reaction action



Trick #2

Correlated Enums and Strings



The Problem: These MUST match

```
typedef enum                                static const char* MsgNameText[] =
{
    MSG_PlayerSighted,                    "MSG_PlayerSighted",
    MSG_HeardSound,                       "MSG_HeardSound",
    MSG_SetTarget,                        "MSG_SetTarget",
    MSG_Arrived,                          "MSG_Arrived",
    MSG_Reset,                             "MSG_Reset",
    MSG_NUM                                "Invalid"
} MSG_Name;                                };
```



names.h

```
// Actual file with no semicolons!  
REGISTER_ENUM(MSG_PlayerSighted)  
REGISTER_ENUM(MSG_HeardSound)  
REGISTER_ENUM(MSG_SetTarget)  
REGISTER_ENUM(MSG_Arrived)  
REGISTER_ENUM(MSG_Reset)
```



Create the Enum

```
#define REGISTER_ENUM(x) x,  
typedef enum  
{  
    #include "names.h"  
    MSG_NUM  
} MSG_Name;  
#undef REGISTER_ENUM
```



Create the Strings

```
#define REGISTER_ENUM(x) #x,  
static const char* MsgNameText[] =  
{  
    #include "names.h"  
    "Invalid"  
};  
#undef REGISTER_ENUM
```




Too fast?

gameai.pro.com