



# Computer Science and Games: *Just For Girls!*

Introduction

# About Me



# *About Me*

**Bachelor of Computer Science (2002-2007)**

**Masters of Computer Science (2007-2009)**

**PhD Computer Science (2009-now)**

**Faculty Instructor (2013-now)**



# *What About YOU?*

Let's get to know each other.

**What school are you from?**

**What made you sign up for this course?**

**What activities do you do outside of class?**

**What kinds of games (board, card, video...) do you play or watch others play?**

**What is something interesting about you we can't tell by looking at you?**



# Computer Science and Games: *Just For Girls!*

Looking at computer  
science



# What is Computer Science?

*The big fancy definition:*

**Computer science (or computing science) is the study of the theoretical foundations of information and computation and their implementation and application in computer systems.**

[http://en.wikipedia.org/wiki/Computer\\_science](http://en.wikipedia.org/wiki/Computer_science)

# *What is Computer Science?*

It's all about finding ways to figure stuff out.

**What can be computed automatically?**

**How hard is it to compute?**

**What cool applications are there?  
(Like games!)**

**What's the best way to set up a computer  
so it can do all this stuff fast?**

We are limited only by our imagination...



*Computer Science Goes Well With...*



# Computer Science Goes Well With...

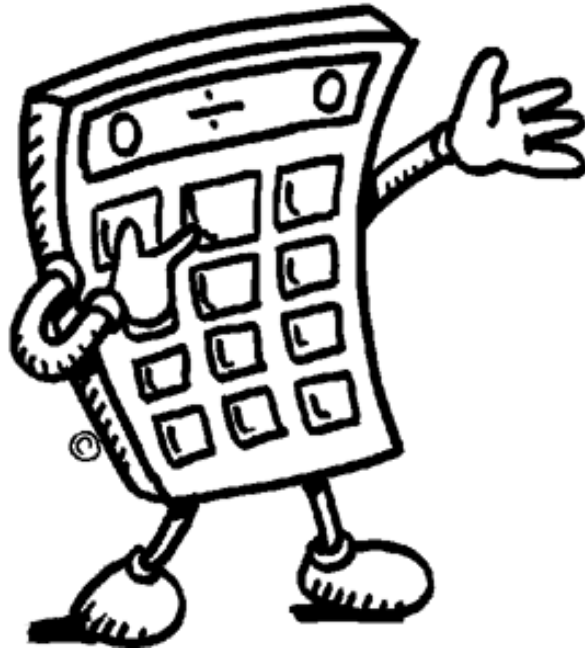


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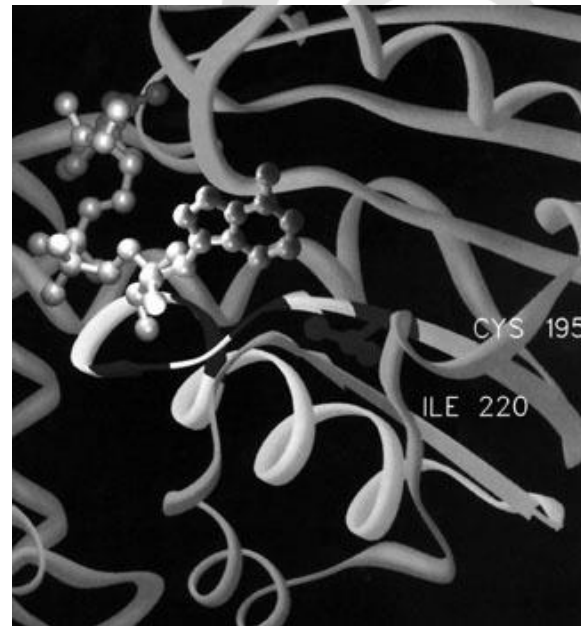
*Computer Science Goes Well With...*



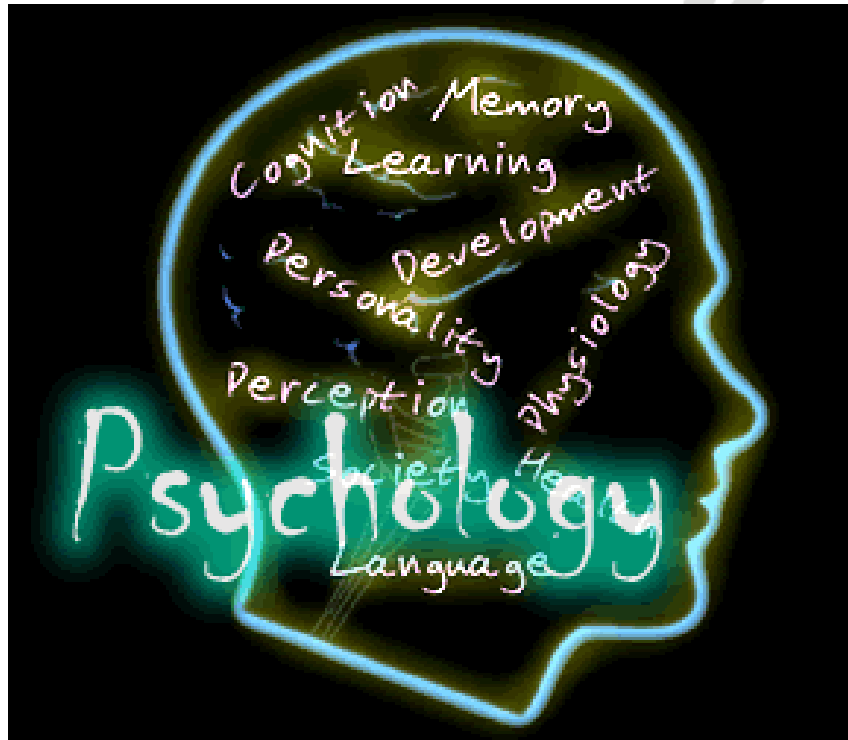
*Computer Science Goes Well With...*



# Computer Science Goes Well With...

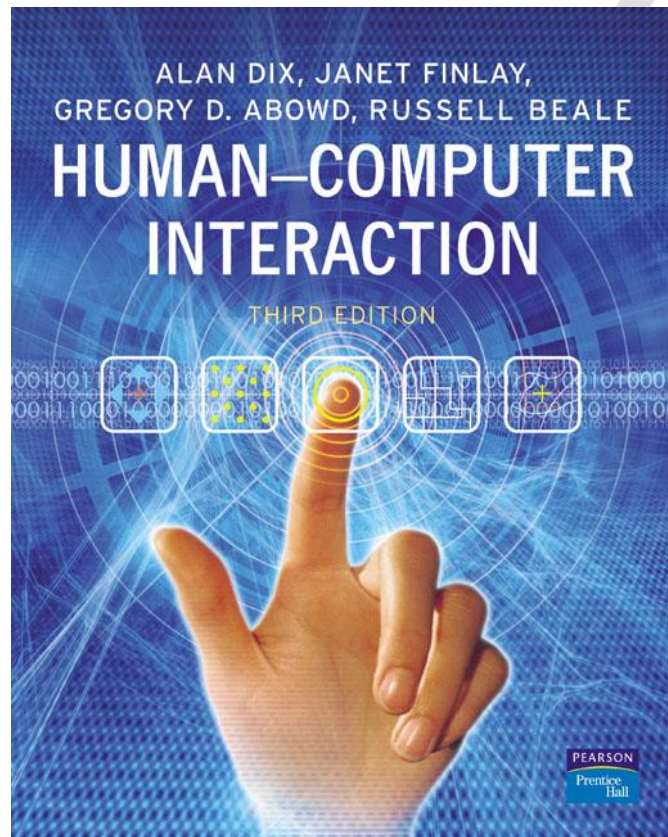


# Computer Science Goes Well With...



<http://departments.weber.edu/psychology/Psychology.gif>

# *Computer Science Goes Well With...*



<http://images.pearsoned-ema.com/jpeg/large/9780130461094.jpg>

# *Computer Science Goes Well With...*



<http://hornbillunleashed.files.wordpress.com/2009/10/law.jpg>



*Computer Science Goes Well With...*



*Computer Science Goes Well With...*



*Computer Science Goes Well With...*



*Computer Science Goes Well With...*

**... pretty much anything  
you want it to!**

# *Pathways in Computer Science*

Video from University of Washington  
Computer Science and Engineering

[http://www.youtube.com/watch?v=jq\\_EcstLlfE](http://www.youtube.com/watch?v=jq_EcstLlfE)



# Computer Science and Games: *Just For Girls!*

What's the connection  
to games?

*What's the connection?*

**Computer Science Research**



**Applications to Games**

*What's the connection?*

**Trying to make games better**



**Breakthrough in research areas**

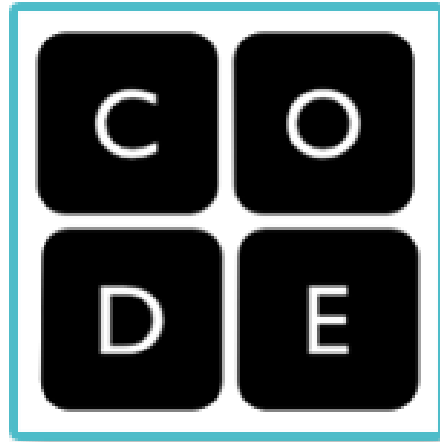


*What's the connection?*

**Learning about computer science using  
games as an example application**



**Learning about computer science is  
more fun!**



[www.code.org](http://www.code.org)



# *Credits*

Notes by your instructor Gail Carmichael:

[contact@gailcarmichael.com](mailto:contact@gailcarmichael.com)

<http://gailcarmichael.com/>