



CS1428

Foundation of Computer Science

Lecture 1: Introduction

Who am I?

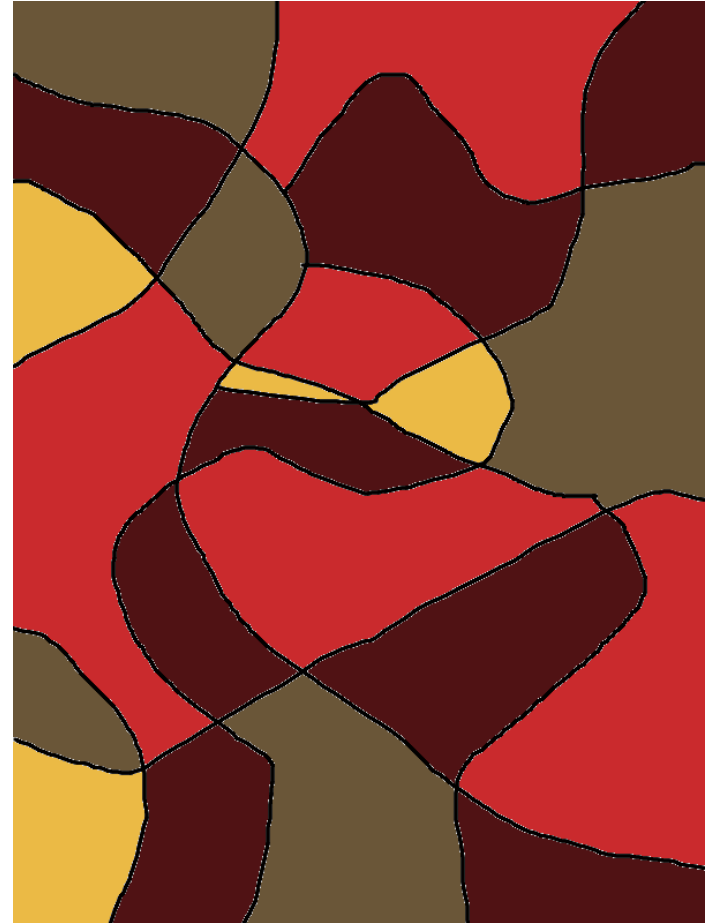
- Gentry Atkinson
- Recently graduated PhD
- Born in Houston, TX
- My research focus is machine learning and bio-signal processing.
- Two truths and a lie:
 - My favorite food is Korean Barbecue.
 - Both of my parents are from Oklahoma.
 - My wife and I were married on the lawn of the Texas Capitol.

What is this class?

- Introductory! (but you should be familiar with some math)
- Two purposes:
 - We will study the broadest possible concepts from the field of Computer Science.
 - We will learn how to construct simple programs in C++.

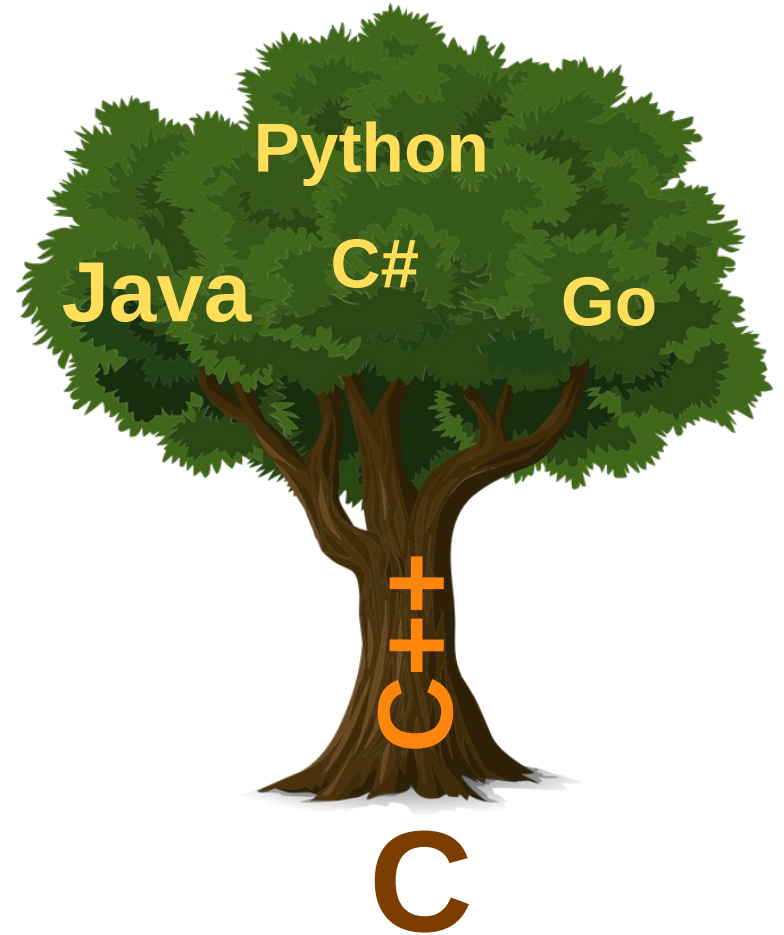
Why study programming?

- Broadly applicable.
- Broadly employable.
- It's a powerful tool for studying information processing.
- **4 Color Theorem**
 - Kenneth Appel and Wolfgang Haken
 - 1976
 - 1,834 graph configuration generated by computer.



Why study C++?

- Broadly applicable.
- “Trunk” of a family of languages.
- Teaches more about the computer than other languages (e.g. memory management)
- Compromises the needs of many fields.



Communication Overview:

- My email: gma23@txstate.edu
 - 24 hour response time on weekdays
 - 48 hour response time on weekends
 - Please use email to contact me. I don't check the Canvas messaging system.
- Modules should be studied on Canvas **before** attending lecture.
- Treat each other with civility.

Grading Policy:

- Breakdown:
 - 10% in class
 - 10% modules on Canvas
 - 40% 4 coding projects
 - 15% Midterm
 - 15% Final
 - 10% Lab
- Final grades will not follow the “plus minus” system.
- Up to 3 points of extra credit can be earned on HackerRank

Required Materials:

- **The C++ Workshop**
 - Dale Green, Kurt Guntheroth, and Shaun Ross Mitchell
 - Available free from Alkek
- Integrated Development Environment:
 - CodeBlocks is supported by the department.
 - You can use whatever IDE you want but your work should be submitted as a .cpp file.
- Canvas → make sure that you have access.
- Bringing a laptop or tablet to class is encouraged. You will need to have a laptop or tablet to take the midterm and final.

Late Work:

- **Very fast pace!**
- Only Coding Projects can be submitted late (up to 24 hours).
 - Excused absences can be arranged with the Dean of Students.
- Meeting everyday can be tiring but is actually a great way to learn coding.

Questions or Comments?