# Personal

- Name: Aaron Bauer, "Aaron" or A-A-ron
- New member of the CS department
  - just moved to Northfield this month, finished PhD at University of Washington in Seattle
  - thrilled to be at Carleton, looking forward to learning from those of you that have been here a lot longer than I have
- Interests
  - games, musical theater, history, politics
  - latest obsessions: Democratic presidential primary, Vietnam War, D&D
- Goals
  - (a) convince you that computer science generally and programming specifically are useful tools for solving all sorts of problems and (b) give you the skills you need to put this tool to use
    - not mastery of every aspect, but knowing "this is the sort of thing a computer would be good at, and here's how it might do it"
  - takes hard work, persistence
    - personal emotional rollercoaster
  - nothing magic or innate required
    - Assuming no prior experience whatsoever!
  - help from me, our prefect, our course staff, esp. fellow students
- Prefect intro

# Syllabus

• calendar

### grade breakdown

- homework 0.5
  - 3 individual, 4 pair (assigned)
  - feedback file
- quizzes 0.2
  - 4 quizzes, on the Fridays of weeks 2, 4, 6, 8
  - About 25 minutes each
- final project 0.25
  - project of your choice, solo or in a group of 2 (not assigned)
  - more detail to come
- participation 0.05
  - ask/answer questions in class
  - ask/answer questions on the Moodle forums
  - submit lecture feedback forms
  - important and valuable to be wrong in class!

#### inclusivity

- please treat your classmates with kindness and respect, both inside the classroom and out. Classrooms can be vulnerable environments; asking questions and expanding our understanding of new concepts requires us to reveal over and over again that we don't fully know something. It's okay to not know everything immediately! It's not okay to make people feel bad about what they don't know. Our individual differences enrich and enhance our understanding of one another and of the world around us. This class welcomes the perspectives of all ethnicities, genders, religions, ages, sexual orientations, disabilities, socioeconomic backgrounds, regions, and nationalities.
- late days
  - 4 late days, used in 24-hour chunks, email me before the homework is due, both partners must have available late days to use them

- collaboration
  - You should never be in possession of a (paper or electronic) copy of a classmate's code before the due date for the assignment
  - when getting help, that consultation should be in English and not in Python
  - Need to be able to explain anything you submit, give credit where credit is due
- anonymous feedback
  - Linked from web page and Moodle
  - really really helpful for me!
- visiting hours
  - visit me in my office (CMC 135) on Mondays (2-4)
  - come with questions about anything or just to chat!
  - email to set up another time or just come find me
  - I'll in the lab CMC 304 Wednesdays 8-9, and CMC 102 Thursdays 7-8
- 111 has high expectations, I'm here to give you the help you need to meet them
  - learning goals
- advice from students last term: start early and ask for lots of help!

## Writing your name

- Instructions
  - pen down
  - pen up
  - move with angle and distance (sorry Metric users)
- Write the algorithm for AARON
  - reuse procedure for A

- Write the algorithm for your own
  - have neighbor execute algorithm
- Reflections

# Programming

- computers are dumb, instruction-following machines
  - pass the salt example
- always lots of ways to accomplish the same thing
  - I will present a way of doing things that will be helpful to you
- model of computation
  - cpu, memory, persistent storage (HD), other I/O
  - code live on HD, loaded into memory when run
    - instruction pointer
    - controls flow of data
- computer scientists borrowed a lot of math terms and symbols for only somewhat similar concepts
- I'm excited to share my passion for CS with you
  - but you don't need to be a programmer or love programming to find it a handy tool to have in your toolbox