## WHAT ISCOMPUTERSCIENCE ANYWAY?



### Hello! I'M SAMANTHA VOIGT

BHS class of '13 Wellesley College CS Major '17 WHY AM I HERE?

About my experience

# I MAKE SOFTWARE

### I'VE INTERVIEWED WITH



### I'VE WORKED AT WOMENG HEAR + NOW: COLLEGE ESTON also... **c**

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### ABOUT COMPUTER SCIENCE

Ok, let's get to the point

### QUICK GOOGLE-SEARCH DEFINITIONS

- Computer science is a discipline that involves the <u>understanding</u> <u>and design of computers and computational processes</u>. In its most general form it is concerned with the understanding of information transfer and transformation. Particular interest is placed on making processes efficient and endowing them with some form of intelligence. The discipline ranges from <u>theoretical studies of algorithms to practical problems of implementation</u> in terms of computational hardware and software.
- Computer science is a discipline that spans theory and practice. It requires thinking both in abstract terms and in concrete terms. The practical side of computing can be seen everywhere. Nowadays, practically everyone is a computer user, and many people are even computer programmers. Getting computers to do what you want them to do requires intensive hands-on experience. But computer science can be seen on a higher level, as a science of problem solving. Computer scientists must be adept at modeling and analyzing problems. They must also be able to design solutions and verify that they are correct. Problem solving requires precision, creativity, and careful reasoning.



### MISCONCEPTIONS

Think you already know what coding looks like? Not quite.

### COMPUTER SCIENCE IS **NOT**...

- Solitary
- Only for the stereotypical nerd that still lives in the basement at his parent's house
- About always getting things right
- Fixing broken computers or working in IT
- All about math

### COMPUTER SCIENCE IS...

- Making things
- BREAKING things
- Solving puzzles
- Critical thinking
- Impactful
  - The internet! Google! Airplanes! Space travel!
- COLLABORATIVE + interdisciplinary
- Where Googling for answers is often encouraged
- In demand!

1,000,000

More computer science jobs than students by 2020

\$61,321+

Average starting salary for a CS major in 2015



### A DAY IN THE LIFE

What does a software engineer do?

### A "TYPICAL" SWE IN INDUSTRY MIGHT...

•	<u>~ 10am:</u> Get to work around + grab coffee & breakfast
•	10:45am: Daily standup or sprint planning
•	11am: Spend some time working on their tasks (coding)
•	12:30pm: Grab lunch from the cafeteria with their team
	1:15pm: Learn about a bug, pair-program with someone to fix it, push the fix to production
	2:45pm: Take a break to play some ping pong with coworkers + grab a snack from the microkitchen
•	3:30pm: Review the code of those on your team
•	4:30pm: Improve the code for the new feature they're developing based on team feedback
•	<u>5:30pm:</u> Code, code (solve problems)
•	<u>~6:30pm:</u> Go home/grab dinner in the cafeteria

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### WHAT DOES CODE LOOK LIKE?

Let's write computer programs in Python!

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"First, solve the problem. Then, write the code."

- John Johnson

### WANT TO LEARN MORE?

- Codecademy
- Code School
- Hackathons!!!
- Open source (GitHub)
- Facebook groups
  - Ladies Storm Hackathons
- Online tutorials
- College and/or bootcamps

### Thanks!

### ANY QUESTIONS?

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