# Victory Lap

CSE 143 19su

#### Where Have We Been?

- → CS Concepts
  - client / implementer, efficiency, recursion, hashing, etc.
- → Data Structures
  - ♦ Lists, Stacks, Queues, Sets, Maps, etc.
- → Java Language
  - references, generics, inheritance, polymorphism, etc.
- → Java Collections
  - ArrayList, LinkedList, TreeSet, HashSet, etc.

### Where Did We Learn?

- → Abstraction
  - use existing code without understanding the implementation
  - implement components that can be used in that same way
- → Problem Solving
  - breaking down problems and <u>drawing pictures</u>
- → Design Decisions
  - writing code that is efficient and scales well
  - keeping code easy to read for maintainability
- → Recursion
  - redefine problems in terms of smaller versions of themself
  - write concise but incredibly powerful code

## What Other Languages?

- → It depends on what you want to build...
  - ♦ iOS apps: <u>Swift</u>
  - Android apps: Java, <u>Kotlin</u>
  - ◆ Client-side web: <u>lavascript</u>
  - Data processing: <u>Python</u>
  - Data Management: <u>SQL</u>
  - ◆ Embedded systems: <u>C</u> / <u>C++</u>

- → What about functional programming?
  - Racket, Haskell, Scala, Java 8 Lambdas

## What Other Classes Should I Take?

- → CSE non-majors
  - ◆ CSE 154: Web Programming
  - ◆ CSE 163: Data Programming
  - ◆ CSE 373: Data Structures and Algorithms \*
  - ◆ CSE 374: Programming Concepts and Tools
  - ◆ CSE 413: Programming Languages
- → CSE major
  - CSE 311: Foundations of Computing \*
  - ◆ CSE 332: Data Structures and Algorithms
  - ♦ CSE 341: Programming Languages
  - ♦ CSE 344: Intro to Data Management
  - ◆ CSE 351: Hardware / Software Interface

## What About Internships?

- → You can get them knowing what you do now
- → There are lots of career fairs around campus
  - Especially in the Autumn and Winter quarters
  - Starting looking early
- → Apply to lots of places
  - ◆ You will get rejected at times (trust me...)
- → If you are just starting out...
  - Microsoft Explore, Google Practicum, Facebook University

What Else Do You Want to Know?