

CSE 444 - Mobile Application Programming

Mondays (Room 1-231 CST) & Wednesdays (Room 3-216 CST)

5:15pm - 6:35pm

Office Hours TBD

iOS Mobile Application Development

Monday (Room 1-231 CST) & Wednesdays (Room 3-216 CST)

5:15pm - 6:35pm

Office Hours TBD

**What will you learn in
this course?**

iOS Development (duh)

How to build complex applications

Real-life Object-Oriented Programming

The heart of Cocoa is 100% object-oriented

Application of MVC design model

Swift

Apple's APIs and Frameworks

How to play audio and video files

Access the camera and save pictures to the Photos library

Use location services to pinpoint your position on a map

Display webpages

Animations, SiriKit, Accessibility, Location, etc

Time Management

Dealing with uncertainty

Estimating level of effort

Basic understanding of Github

What will you learn in
this course?

What is iOS?

iOS Architecture

iOS Architecture



Cocoa Touch

Media

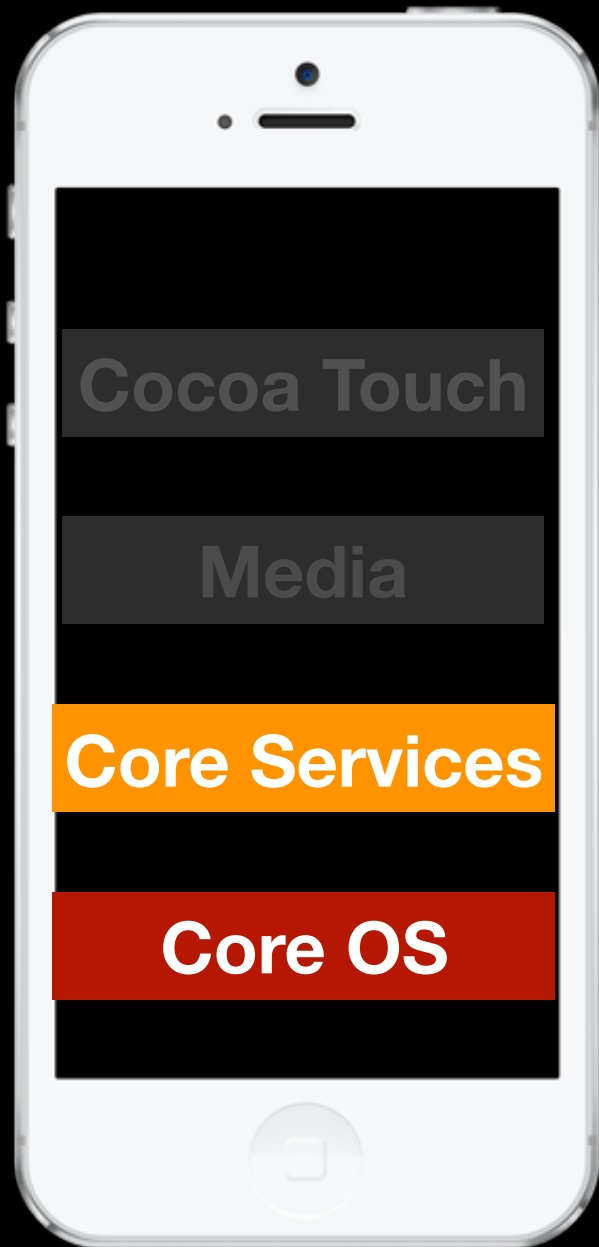
Core Services

Core OS

iOS Architecture



iOS Architecture



Lower Layers:

Provide the basic services the higher level layers rely on

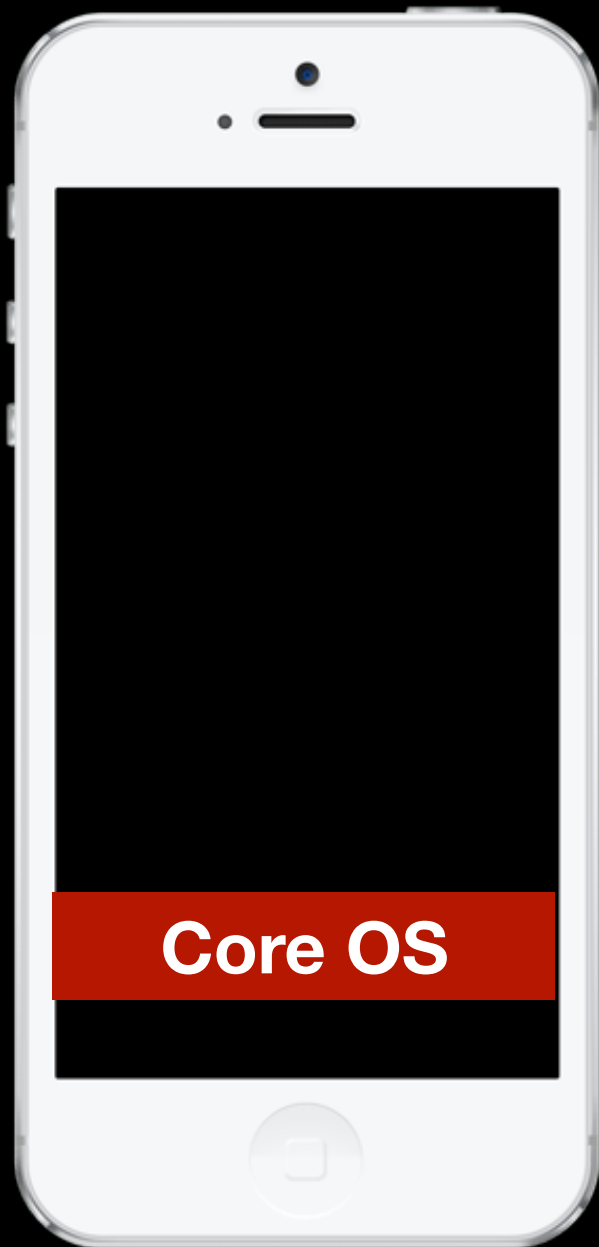
iOS Architecture



Higher Layers:

**Provide sophisticated graphics
and interface related services.**

iOS Architecture



OSX Kernel

Bonjour

Mach 3.0

Certificates

BSD

Keychain Access

Sockets

Power Management

Security

iOS Architecture



Collections

Address Book

Networking

File Access

SQLite

Core Location

Net Services

Threading

Preferences

URL Utilities

iOS Architecture



Core Audio

OpenAL

Audio Mixing

Audio Recording

JPEG, PNG, TIFF

PDF

Quartz (2D)

Core Animation

OpenGL ES

iOS Architecture



UIKit

Multi-Touch

Core Motion

View Hierarchy

Localization

Controls

Alerts

Web View

MapKit

Image Picker

Camera

Platform Components

Platform Components

- Tools

Xcode



Instruments



- Languages
- Frameworks
- Design Strategy

Platform Components

- Tools



- Languages **SWIFT**

- Frameworks

- Design Strategy

Platform Components

- Tools



- Languages

SWIFT

- Frameworks



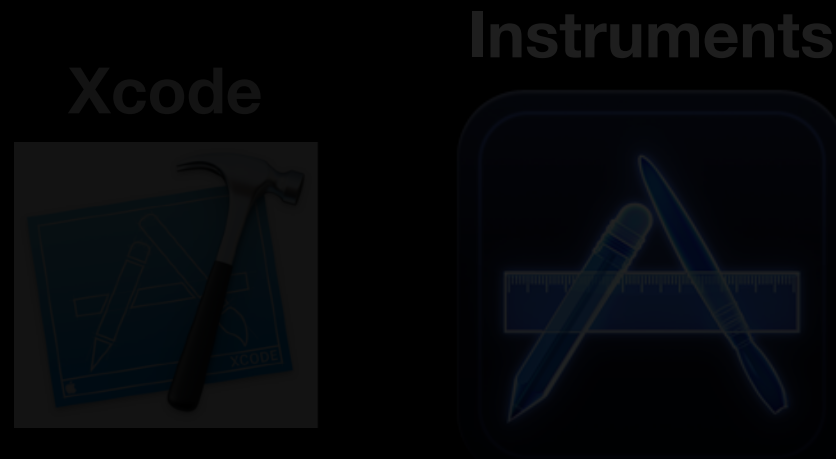
Foundation

UIKit

- Design Strategy

Platform Components

- Tools



- Languages

SWIFT

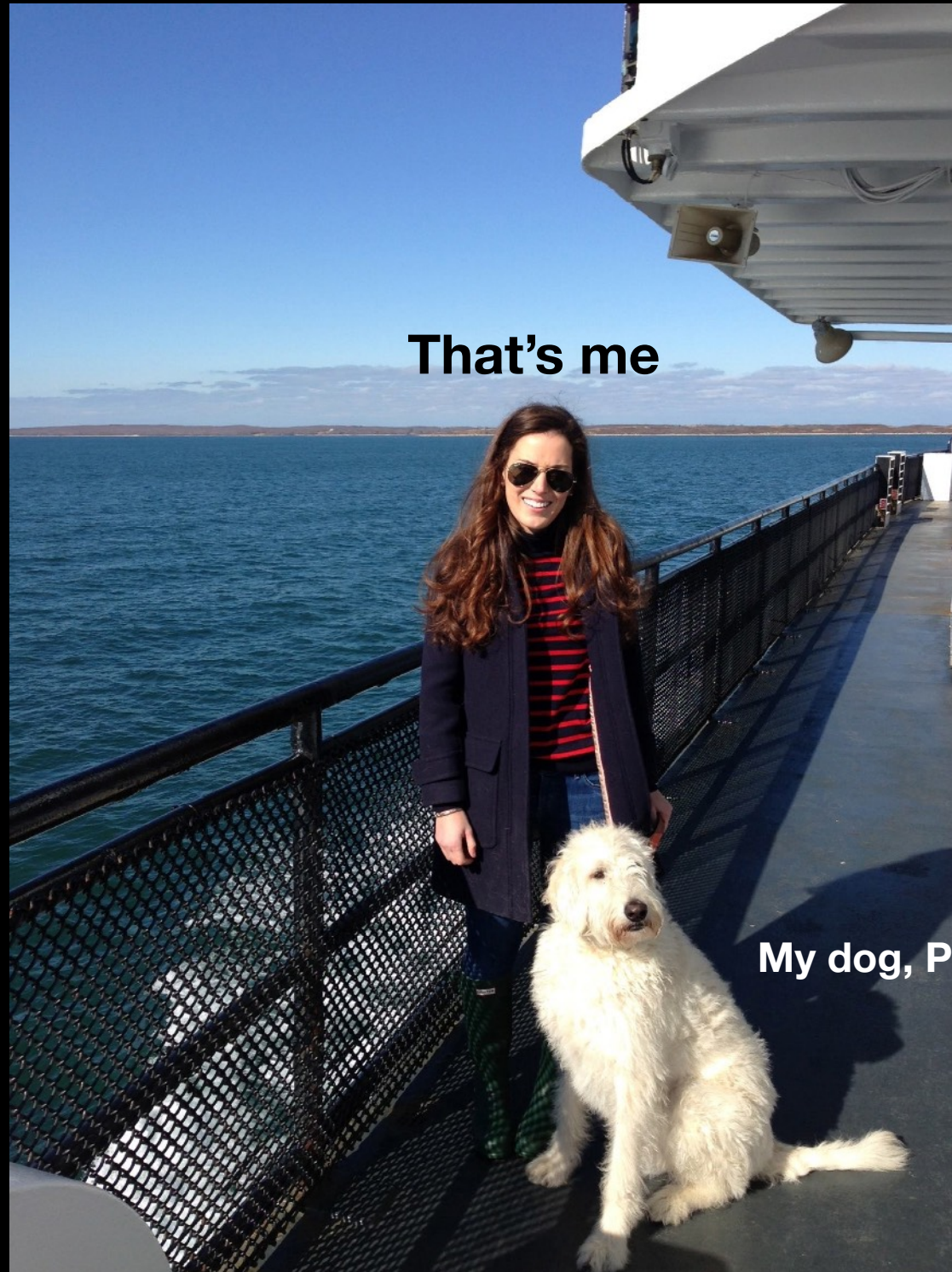
- Frameworks



- Design Strategy: MVC

How You Got Here

Who am I?



That's me

My dog, Pinochle (pea-knuckle)

Who am I?

Rebecca Slatkin



That's me

My dog, Pinochle (pea-knuckle)

Who am I?

Rebecca Slatkin

From Worcester-ish, MA



That's me

My dog, Pinochle (pea-knuckle)

Who am I?

Rebecca Slatkin

From Worcester-ish, MA

**Software Engineer for
~10 years**



That's me

My dog, Pinochle (pea-knuckle)

Who am I?

Rebecca Slatkin

From Worcester-ish, MA

**Software Engineer for
~10 years**

**Moved from Boston
to Utica in July**



That's me

My dog, Pinochle (pea-knuckle)

Who am I?

Rebecca Slatkin

From Worcester-ish, MA

**Software Engineer for
~10 years**

**Moved from Boston
to Utica in July**

**Currently work
remote for June Oven
based in San
Francisco**



That's me

My dog, Pinochle (pea-knuckle)

Who am I?

Rebecca Slatkin

email:
rslatki@syr.edu

From Worcester-ish, MA

**Software Engineer for
~10 years**

**Moved from Boston
to Utica in July**

**Currently work
remote for June Oven
based in San
Francisco**



That's me

My dog, Pinochle (pea-knuckle)

Who am I?

Rebecca Slatkin

From Worcester-ish, MA

**Software Engineer for
~10 years**

**Moved from Boston
to Utica in July**

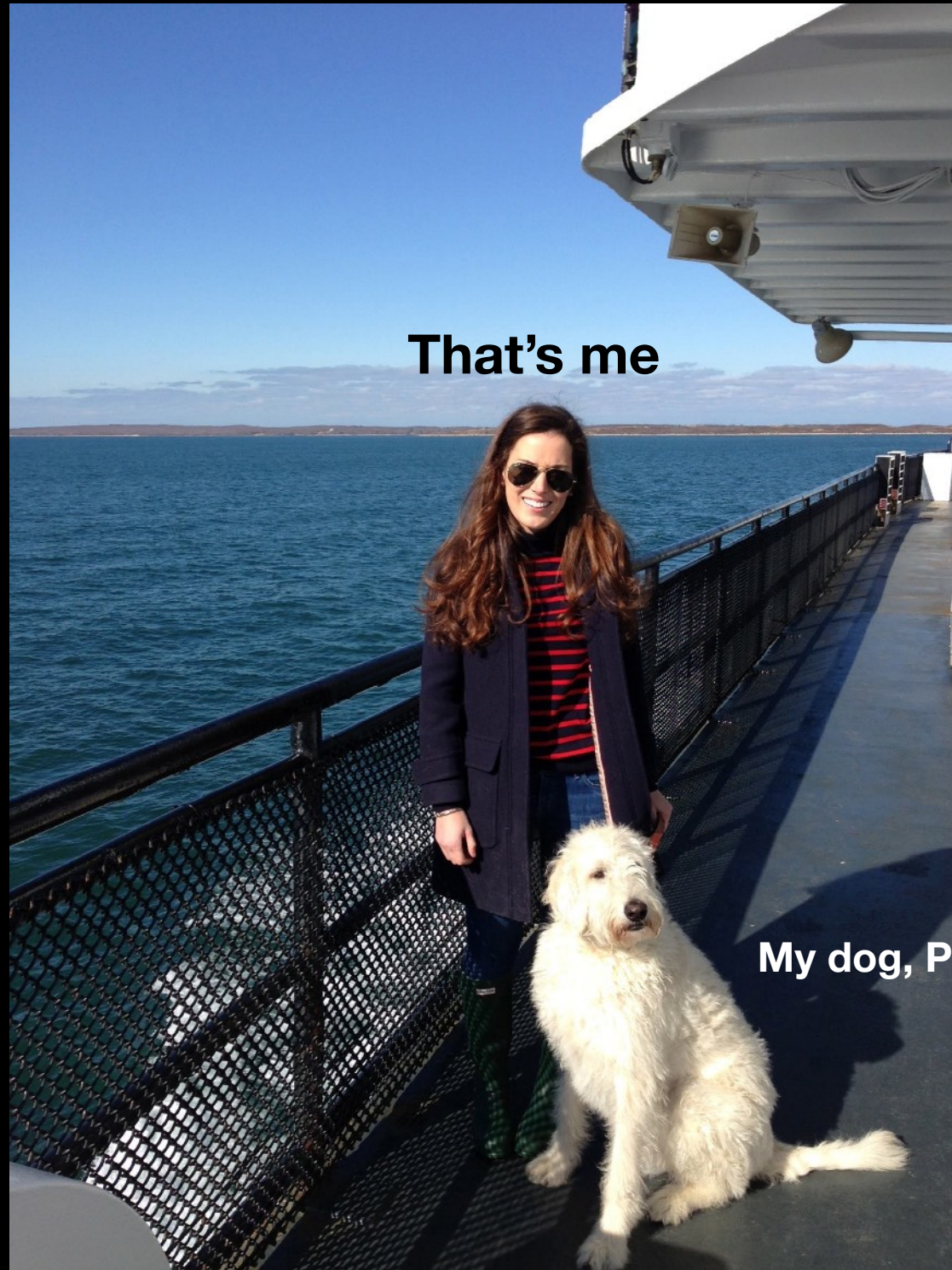
**Currently work
remote for June Oven
based in San
Francisco**

email:

rslatki@syr.edu

mobile:

508-523-6863



That's me

My dog, Pinochle (pea-knuckle)

Who am I?

Rebecca Slatkin

From Worcester-ish, MA

**Software Engineer for
~10 years**

**Moved from Boston
to Utica in July**

**Currently work
remote for June Oven
based in San
Francisco**



That's me

My dog, Pinochle (pea-knuckle)

email:

rslatki@syr.edu

mobile:

508-523-6863

Office Hours: TBD

Before Next Class:

- Download **XCode** if you have a Mac via App Store (it's free)
- Swift Introduction reading (See Blackboard)
- See me after class if you don't have a Mac. We will figure it out.
- Look out on Blackboard for a link to a wiki with detailed syllabus as well as our Classroom Github repository (In progress)

DEMO