# // FLATIRON SCHOOL

APIs Presented by Wachira Ndaiga January 29, 2020

## **APIs**

**Application Programming Interfaces** 



## Agenda

#### Introduction (30 mins)

- A brief history
- Why APIs?
- What is an API?

#### **Breakout Session (10 mins)**

Break (5 mins)

#### Practical (45 mins)

Pokemons

## Introduction

#### **Prerequisites:**

- Client-Server Model
- Request-Response Cycle
- *HTTP(S)* 
  - Methods
  - o Status Codes
- REST
- \* Standard Models Of Computer Networking (OSI Model and TCP/IP Suite)





HTTP Response

**HTTP Request** 

### Introduction

A brief history

#### A Story of Interfaces

Software Libraries OOP Open Source Software Distributed Systems REST

#### UNIVERSITY OF CALIFORNIA, IRVINE

## Architectural Styles and the Design of Network-based Software Architectures

#### DISSERTATION

submitted in partial satisfaction of the requirements for the degree of

#### DOCTOR OF PHILOSOPHY

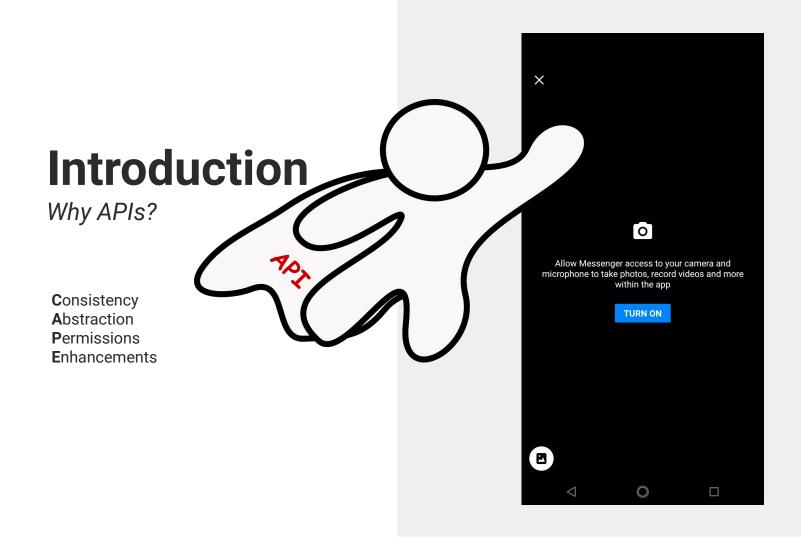
in Information and Computer Science

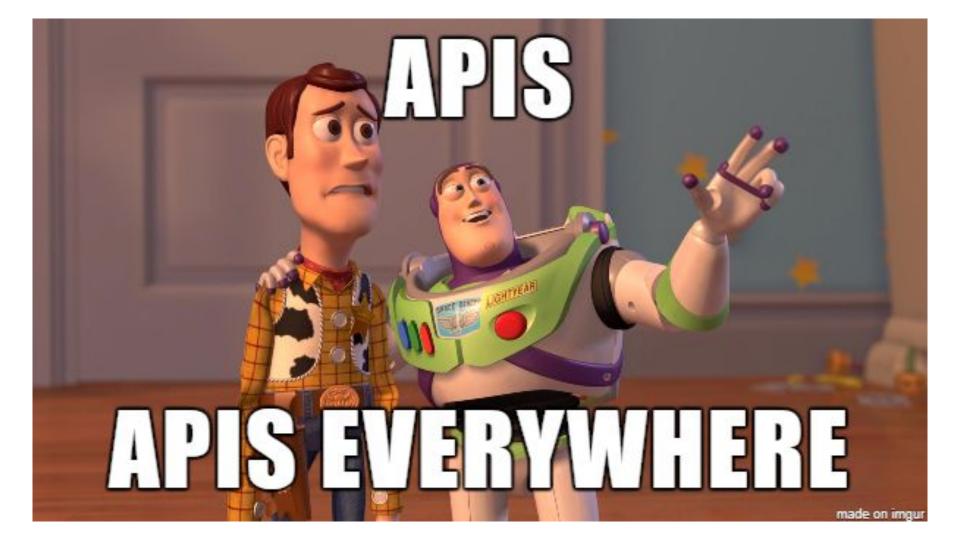
by

Roy Thomas Fielding

2000

Dissertation Committee: Professor Richard N. Taylor, Chair Professor Mark S. Ackerman Professor David S. Rosenblum





## Introduction

What is an API?

An API is a machine-readable interface.

#### **API Domains**

Software Servers Devices



## Breakout

- 1. Why are APIs so important and for what purpose are they designed?
- What technologies / frameworks underpin APIs on the Web?
- 3. What alternatives to HTTP REST APIs exist?
- 4. What possible issues might exist with current REST APIs?

Q&A

## Practical

bit.ly/2E0mlYP