

# CodeSail

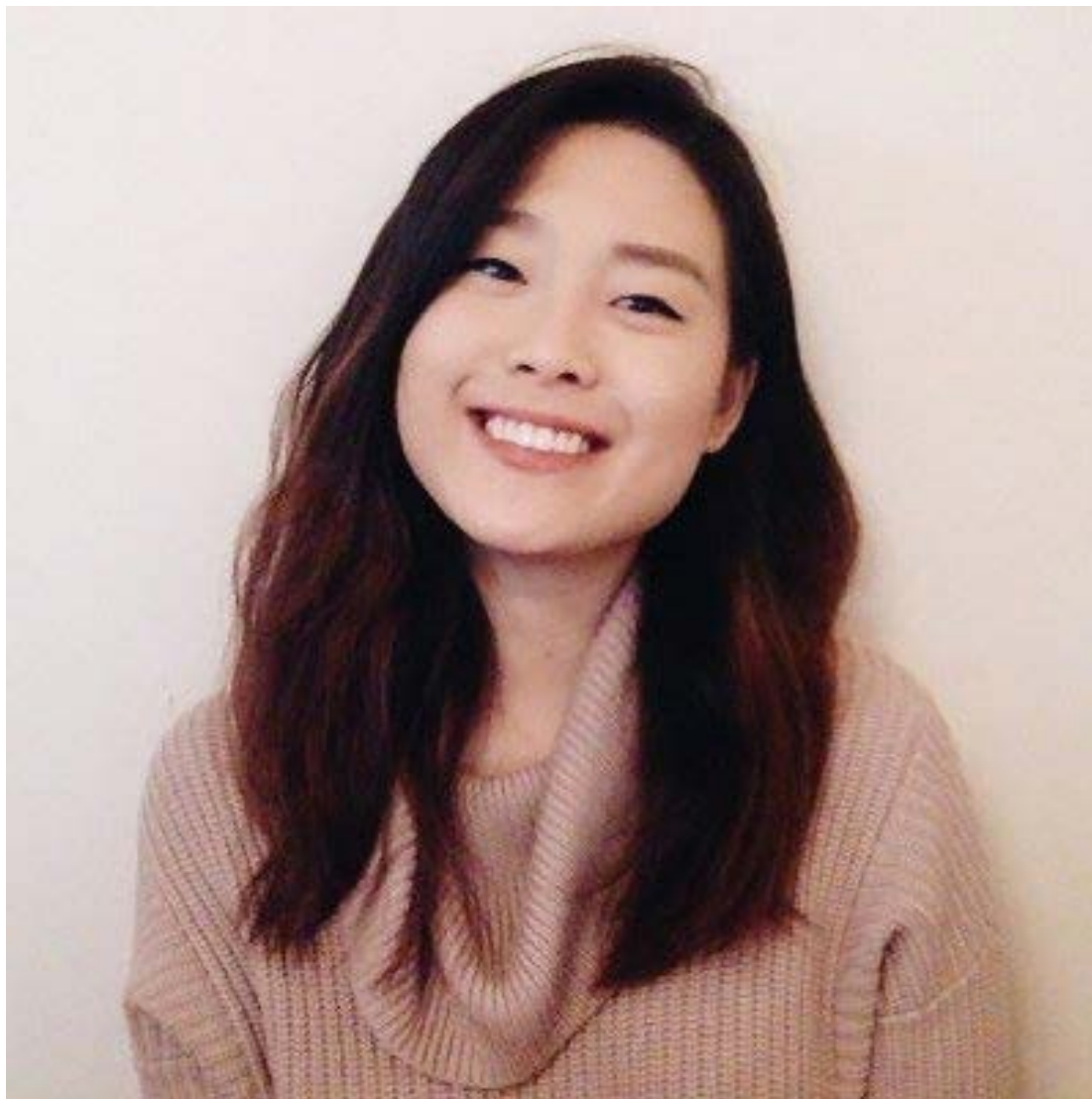
## 2016 Web Development Bootcamp

Welcome!





# Meet April



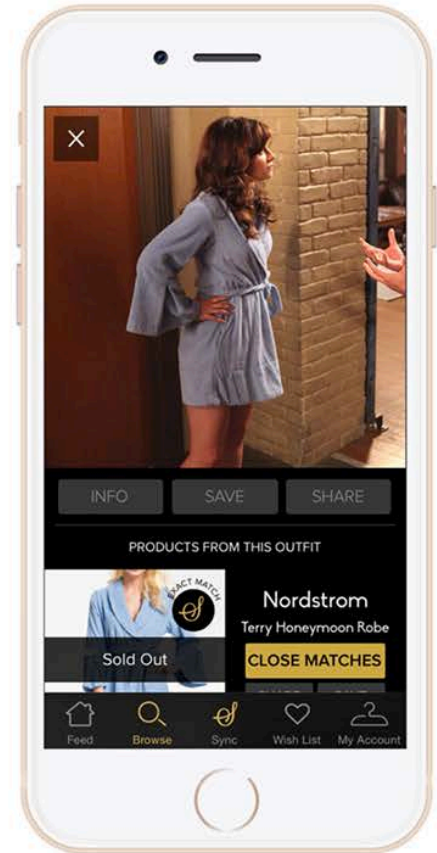
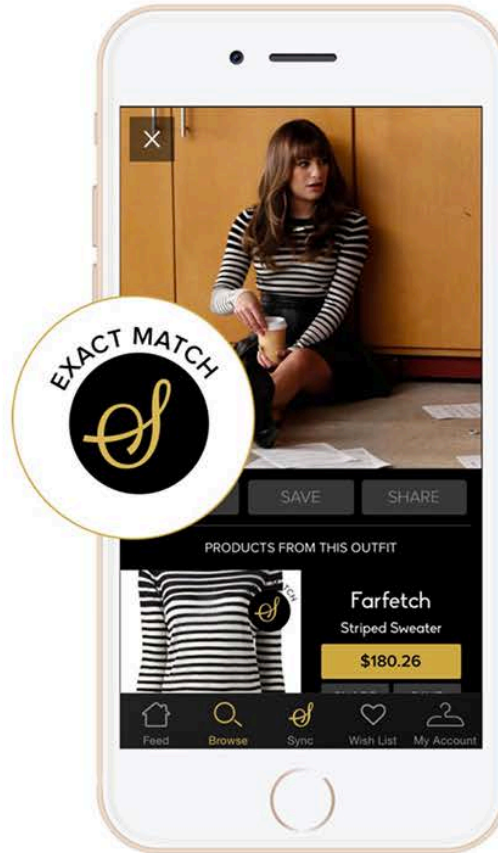
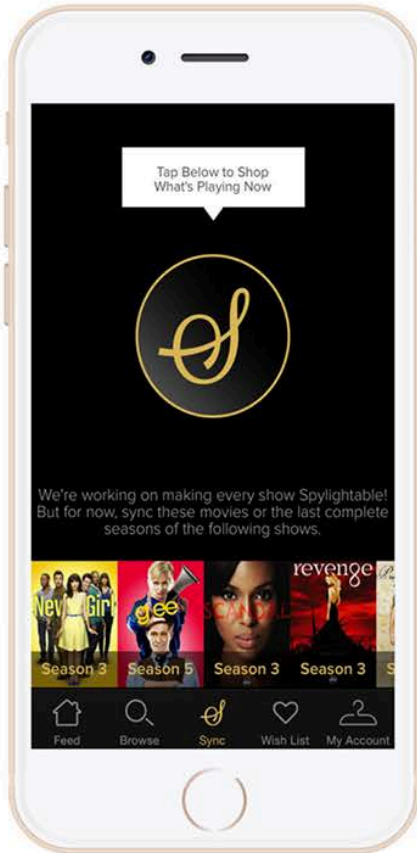


# Final Project: Tastii

- An app that allowed users to easily locate the perfect restaurant based on their mood, financial situation or craving
- Moods included “breakfast at midnight,” “hungover” and “post workout”
- Selected for the Yale Entrepreneurial Institute’s Venture Creation Program



# Spylight





Shazam








# The Triumphant Return



A photograph of two young women in a dimly lit office or computer lab. The woman on the left has dark hair and is resting her chin on her hand, looking intently at a computer screen. The woman on the right has long blonde hair and is also looking at the screen. In the background, another person is visible working at a desk with a computer monitor.

“The intersection between knowledge of a specific field and that of coding adds real value professionally. Although today this quality is an option, it will no doubt quickly become beneficial for many professions as a required and obligatory skill.”

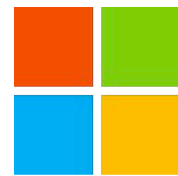
<https://medium.com/the-coffeelicious/3-reasons-why-you-should-absolutely-learn-to-code-8c524dac8120#.s9czxdcrv>

“Even if you don’t want to become a programmer for a living, it’s still worth your time to learn how to program. I mean this in all seriousness: if computers are at all a part of your life, then **learning to program is going to improve your life...** Learning to program can make you more productive, efficient and effective.”

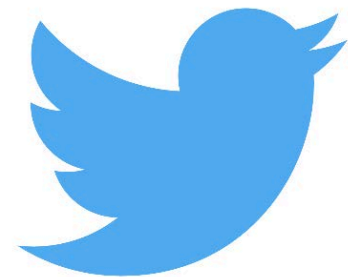




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Microsoft





desmos



*Thorne Prize for Social Innovation in Health*

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A lot of non-technical people  
think they can't code

“I’m just not technical.”

“I’m more of a creative person.”

“I’m not good with computers.”



# That's why we created CodeSail

- We break it down for you into simple steps and digestible bites
- We use accessible languages as the building blocks of the program
- We teach you the HOW and the WHY, not just the WHAT
- Instructors are here full-time to answer questions and help troubleshoot



Everyone can learn to code.





# Hello!

## **Alena Gribskov**

- Yale '09, YEI '09
- YEI Program Director, 2010-15
  - YEI Summer Fellowship
  - Start Something at Yale
- Created & led YEI Tech Bootcamp in 2013, 2014





# Hello!



## John Cadengo

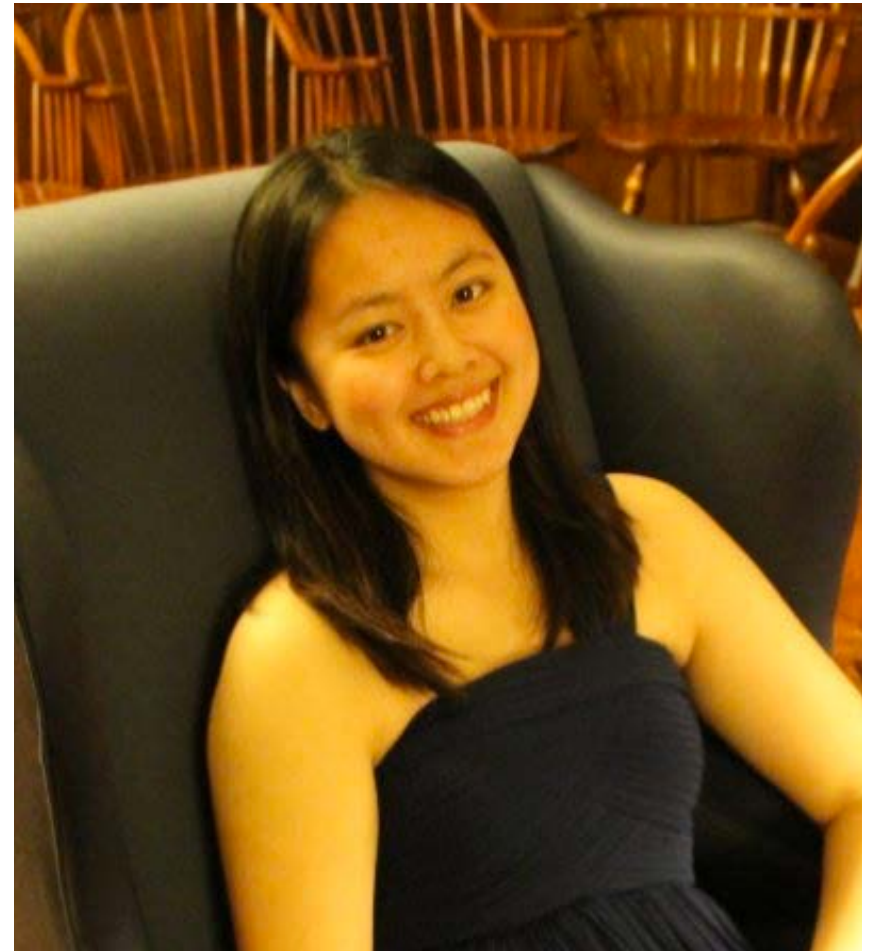
- YEI '13
- Software engineer at GetAround
- Cofounder of Doxa
- Cofounder of Snapsticks, Dash



# Hello!

## **Tiffany Pang**

- Yale '13, YEI '13
- Software engineer at Instacart
- Cofounder of Doxa
- Cofounder of Specially



# Introductions





# The Course





# 2016 Course

- May 25 – July 20, 2016
  - July 20<sup>th</sup> is Demo Day
- 10 a.m. to 6 p.m. everyday
- Here in room 4200 (almost all days)



# 2016 Course

- Morning review
- End-of-day survey
- Course assignments & slides will be in the Github



# Example Day Schedule

10:00 – 10:15 AM	Morning Review
10:15 - 11:30 AM	Morning lecture
11:30 AM – 12:45 PM	Group-based assignment work
12:45 – 1:30 PM	Lunch break
1:30 - 2:00 PM	Finish group-based assignment
2:00 - 3:30 PM	Afternoon lecture
3:30 - 4:30 PM	Individual assignment
4:30 – 5:45 PM	Troubleshooting & code review
5:45 - 6:00 PM	Complete daily survey & closing



# Absences/Lateness

- We take this experience very seriously and ask that you do as well – remember we have limited time and a lot to learn!
- If you must be absent (illness, death in the family, etc.), let us know **as soon as possible**
- Out of respect for your fellow classmates, please be on time – if we have to stop and catch you up, it means THEY are losing time





# 2016 Course

**PROJECT  
based**

**GROUP  
focused**

**PRACTICAL**

**ENTREPRENEURSHIP  
& product  
development**



# 2016 Entrepreneurship Topics

- Intro to entrepreneurship
- Brainstorming good ideas
- Lean startup & business hypotheses
- Teams (tech industry & startup)
- Customer discovery
- Minimum Viable Products
- Tech Interviews
- Effective communication (pitching, etc.)



# Highlights: Instruction Languages

**RUBY &  
RAILS**

**HTML/CSS**

**JavaScript**

**React JS**



# 2016 Course Syllabus

## **Week 1 - Foundation & Developer Tools**

Internet 101, Command Line Interface, Git, GitHub

## **Week 2 - Introduction to Object-Oriented Programming**

Ruby Syntax

## **Week 3 - Web Frameworks and Front-End**

Ruby on Rails, HTML/CSS, Heroku

## **Week 4 - Web Frameworks and Databases**

Ruby on Rails, databases

## **Week 5 - Dynamic Web Applications**

Javascript, JQuery

## **Week 6 - Dynamic Web Applications**

React JS

## **Week 7**

Final Project, Advanced Topics (specific to projects)

## **Week 8**

Final Project, Advanced Topics (specific to projects)

## **Week 8: Demo Day**



# Example Assignments

- Make a gem
  - Students will contribute to Ruby's open source community by creating a gem of their liking from scratch.
- A user-authenticated blog
  - One of the first projects will be to create a blog service from scratch and deploy it to Heroku, where students will write posts about their progress and invite friends and family to create blogs and write comments on their platform.





# Final projects

- Capstone: build your own web application
- Last two weeks
- Small groups of 2-4
- Idea of your choosing (we will help you refine and scope)
- Opportunity to deep dive into technologies, frameworks, etc. you are excited about
- Present at Demo Day



# Past final projects

- Tastii
- BookBound – a social reading app
- Bulldog Taxi – ridesharing to Bradley airport
- Pear – matches students for lunch
- Drawing IO – realtime collaborative drawing
- pNut – anonymous questions during lecture
- Lifestor – geo-tagged journal



# At the end of CodeSail...

You'll be ready to:

- Confidently and independently build your own web applications
- Learn more! CS or on your own
- Apply for software development/tech internships and entry-level positions
- Launch your startup or project



# Activity

- Icebreaker:
  - Tell us your name and what you're bringing to our kickoff picnic 😊
  - Your item should start with the same letter as your name
  - Repeat all previous names & items

# The Experience





# This is an intensive experience



- Confusion
- Fear of looking stupid
- Understanding
- Relapse
- Practice
- Frustration
- Despair
- Revelation
- Joy!

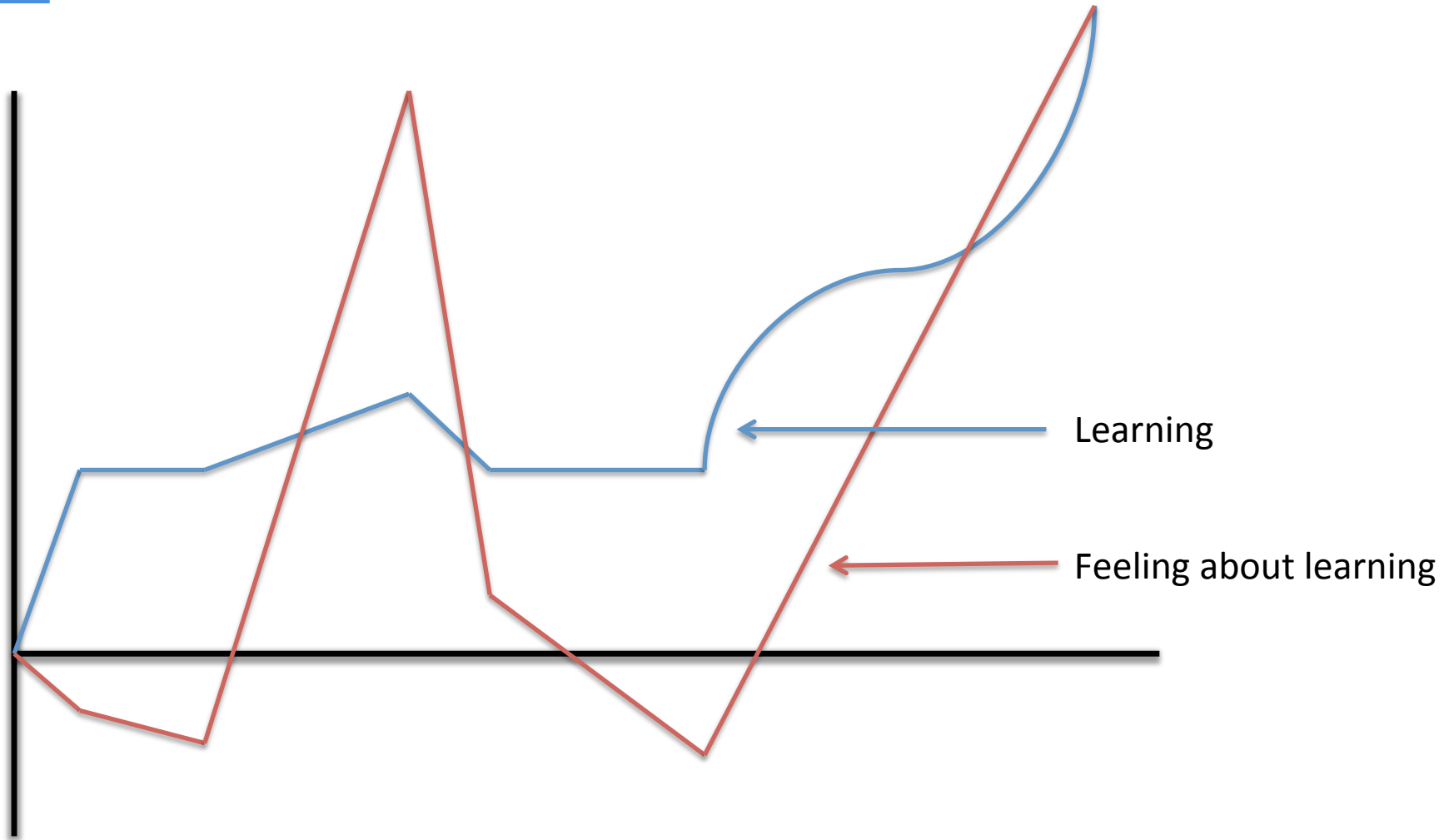


**This is all normal.**





# It is an intensive experience



# Imposter Syndrome





# A different kind of classroom

- We are here to help you
- This is not like a class – you are not getting grades, no one is making you be here
- Getting the “right answer” is less important than understanding how to get there
- Think of us as your guides





# Take ownership of your own learning



Everyone is at a different levels, and that is OKAY (great, even!)

- If you're struggling, speak up
- If you're interested in something and want to learn more, speak up



# Pair programming & group work

- One person's understanding of the code will likely help another person's understanding of the code
- The experience of learning in a bootcamp is to foster that kind of relationship -- to work and learn cooperative (like you would do in a normal workplace).
- If you're ahead, reach out to people to help; it'll help your own understanding of the topic too.
- And if you're behind, reach out for help; we're all here to answer questions and unblock.



# An awesome learning environment

- Borrowed from Recurse Center:
  - No feigning surprise
  - No “well, actually”s
  - No back-seat driving
  - No “subtle –isms”
- Basically: don’t be a jerk, and be supportive of your fellow classmates



# The CodeSail startup mentality

- We are constantly trying to iterate and improve
- PLEASE speak up if you something that's not working, we could be doing better, etc.





# An Archetypal CodeSailor



- Creative
- Humble
- Curious
- Inclusive
- Resourceful





# Goals

- **S**pecific
  - **M**easurable
  - **A**chievable
  - **R**elevant
  - **T**ime-bound
- I want to complete a minimum viable product with X and Y features for my startup by Demo Day
  - I want to have a job/internship related to tech within 3 months of the course



# Activity

- Complete survey!