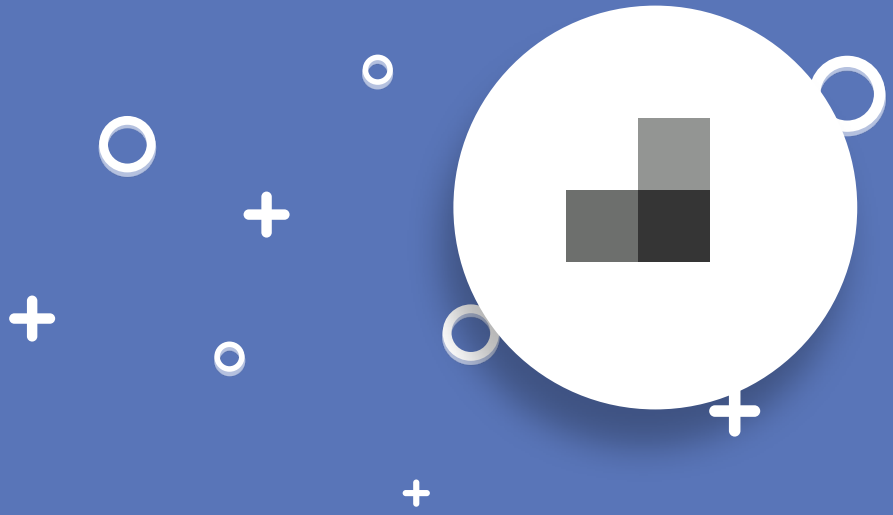


Insight

Bridging the gap: Careers in data science

Overview

I. What does a data scientist do? What are examples of what data scientists do in industry?

II. What are the skills that companies and hiring managers look for in data scientists?

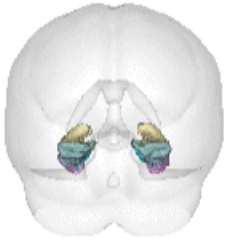
III. How does Insight help people transition from academia to DS?

Who am I?

BOSTON UNIVERSITY

Allen Chang

PhD, Cognitive Neuroscience

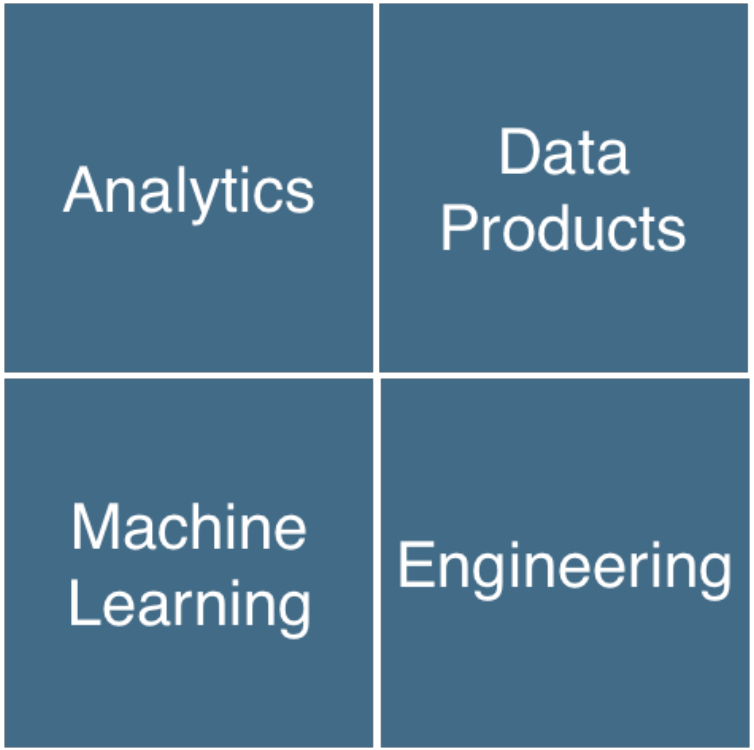


IN

MediaMath

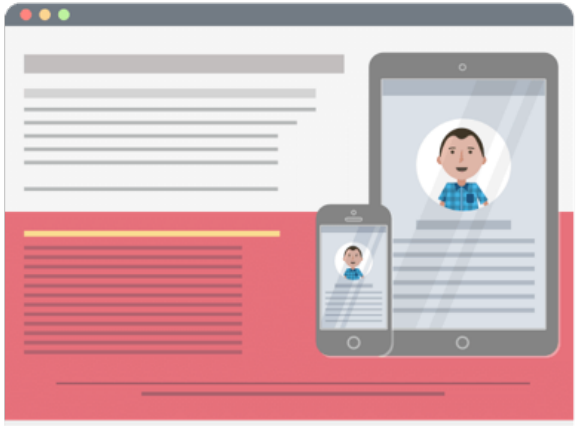
What does a data scientist do?

What is data science anyways?



Data science is a broad term

- Analytics, experimentation, visualization, and data stories.
- Example: A/B Testing (Multi-Armed Bandit)



example.com/a.html

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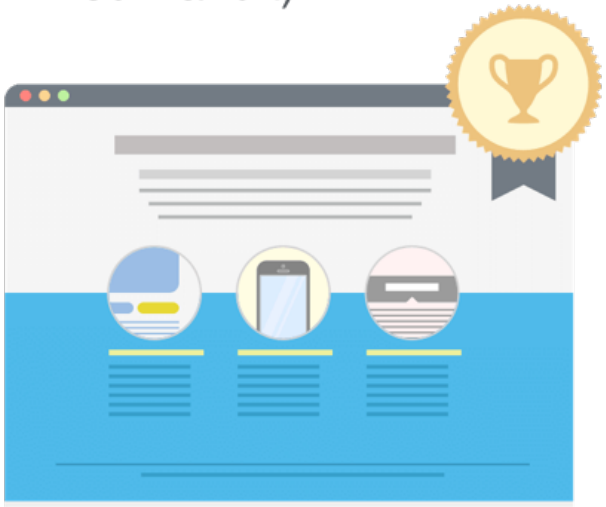
CONVERSION



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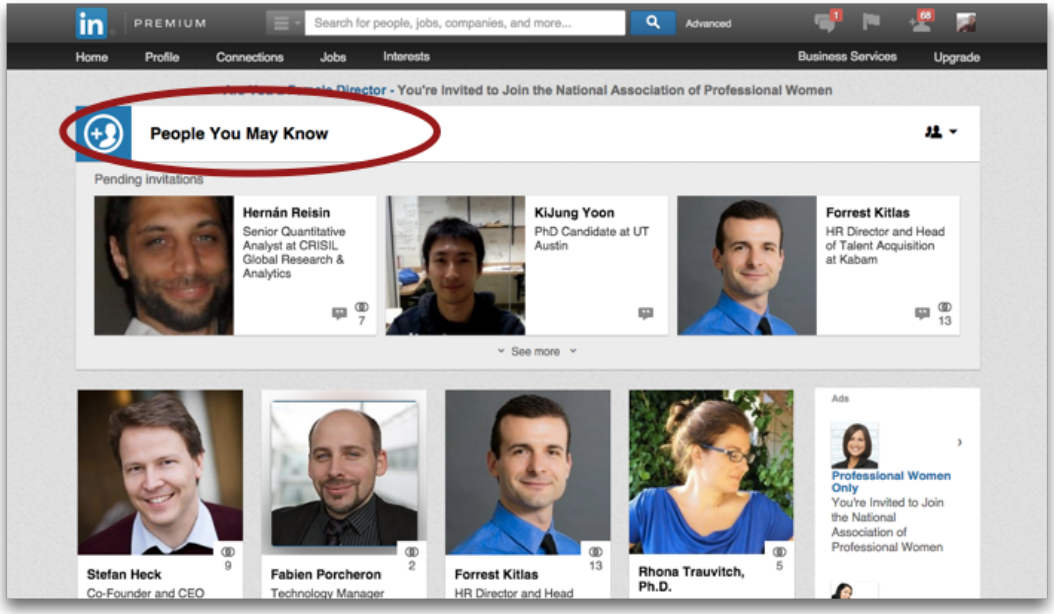
CONVERSION

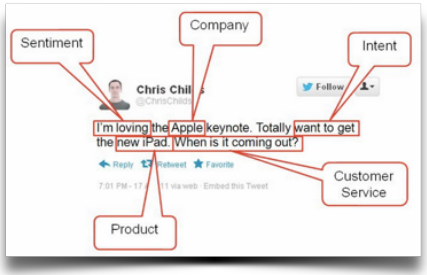
Data science is a broad term

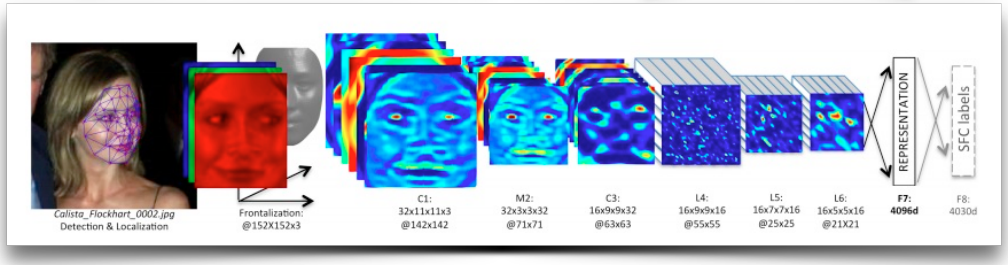
- Data Products and Dashboards



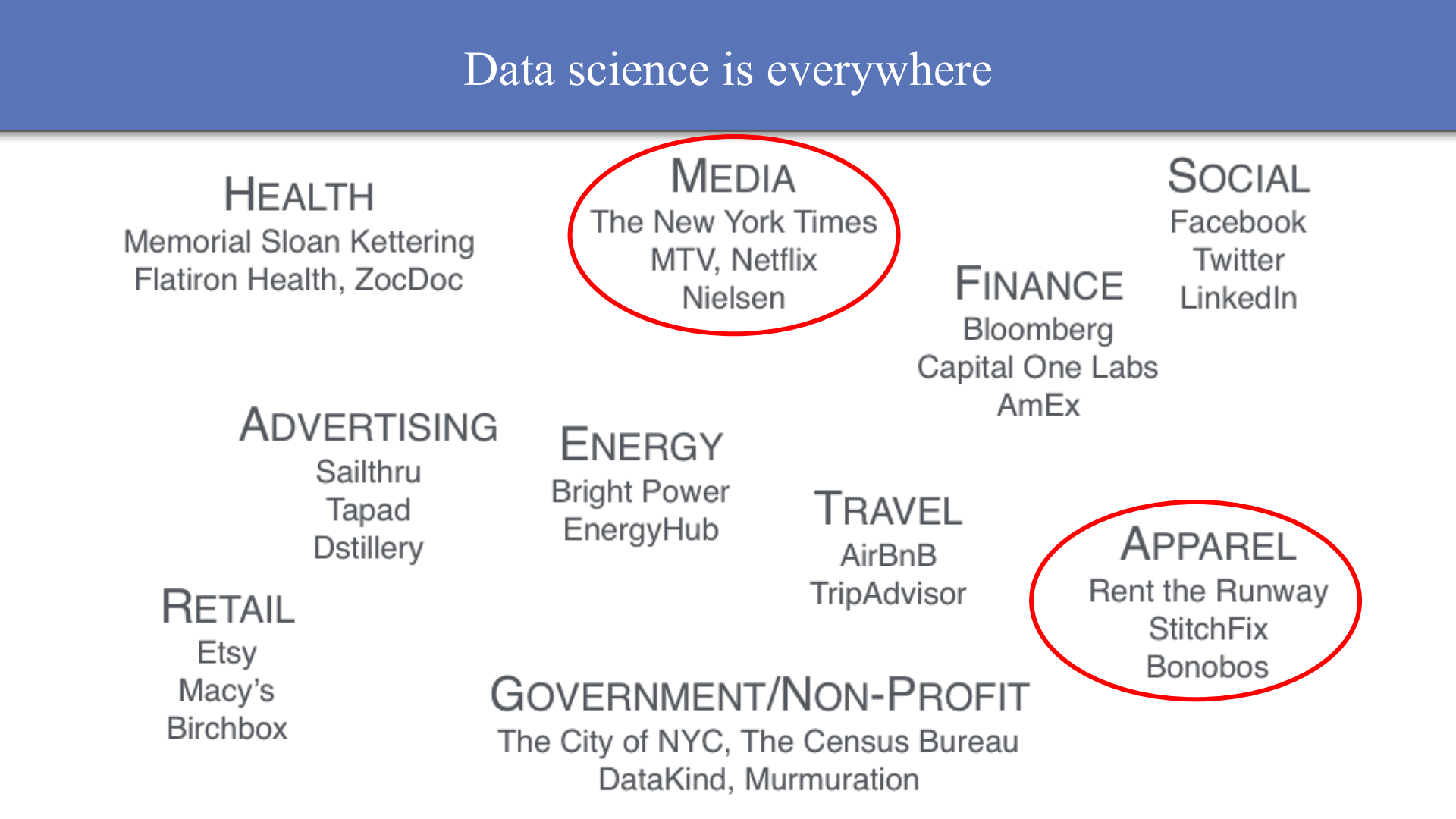
Data science is a broad term

- Machine Learning





Data science is everywhere



Industry example #1: News and Media

- Types of problems you might need to solve if you worked in the news and journalism space
  - What headlines do we show each user?
  - What pictures associated with stories should we show?
  - At what time of the day should new content be released?
  - What advertisements should be with which articles?

Industry example #2: E-commerce and Retail

- Types of problems you might need to solve if you worked in e-commerce

Job of a scientist

- Collect and clean data
- Use programming and statistics knowledge to discriminate between signal and noise
- Convey results to the scientific community

Job of a data scientist

- Collect and clean data
- Use programming and statistics knowledge to discriminate between signal and noise
- Convey results to the team/company/investors
- Make data-informed decisions that directly impact the product and ultimately the business

What are the skills that companies and hiring managers look for in potential data scientists?

Hiring is hard!

1. Costs lots of time and money.

2. False positives have a negative impact on short and long term work.

3. For these reasons (and more), companies seek as much evidence as they can about whether candidates have skills they need

What evidence are companies looking for?

Product	Identify and translate high value problems into a data problem
Execution	Solve and validate their solution against problem-specific metrics.
Communication	Communicate their results back to stakeholders.

Technical Skills

Technical Skills

- Statistics
  - How do you explain whether a test you ran was causal in a change?
- Machine learning knowledge (under the hood!)
  - How do your models work? What is the math underlying the decisions a model makes?
- Computer science fundamentals
  - Can you write code that can be integrated by other teams?
  - Can you work on shared codebases (version control / git)

Behavioral Skills

- Are you a strong communicator?
- How do you work with other people?
- Can you complete work on a tight deadline?
- How do you take the technical details and explain it to someone that doesn’t work in your field?

How can you showcase evidence of these skills?

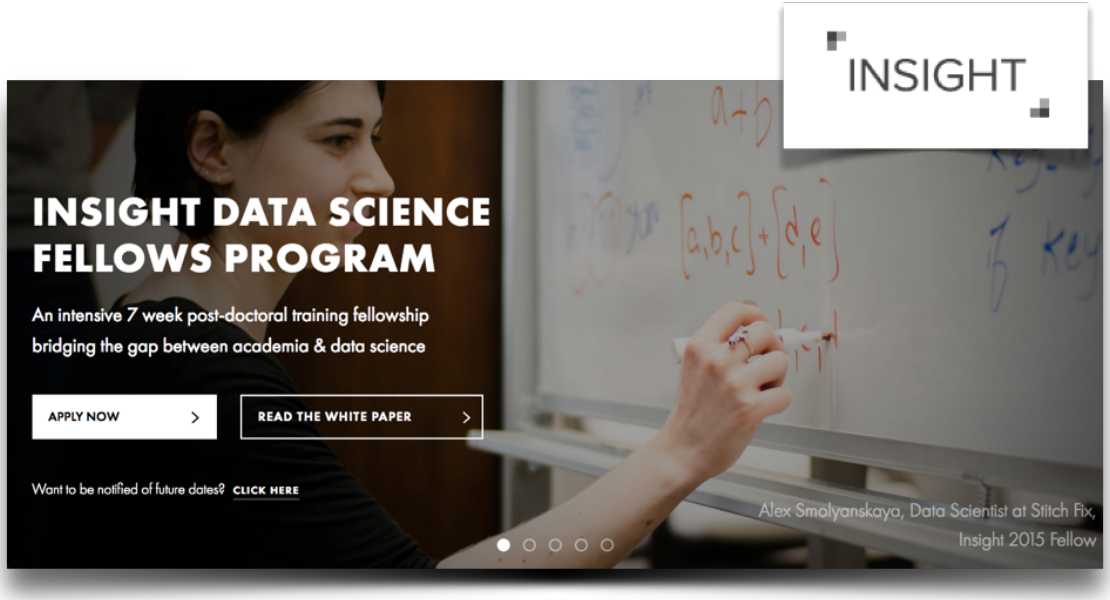
- Technical
  - Work on side projects!
    - Solve a data problem that you or others are having
    - Use this solution to make an actionable difference
    - Put up the code on github
- Communication
  - Write up your results and process
- Apply to Insight!

What to consider when looking at companies

- Size of the company
  - From large corporation to startup
- What type of role are you interested in?
  - E.g. Where in the analytics < - - - - > engineering spectrum do you want to be?
  - Domain / area of interest
- Culture fit
- Mentorship

What is Insight?

An Overview of Insight



insightdatascience.com

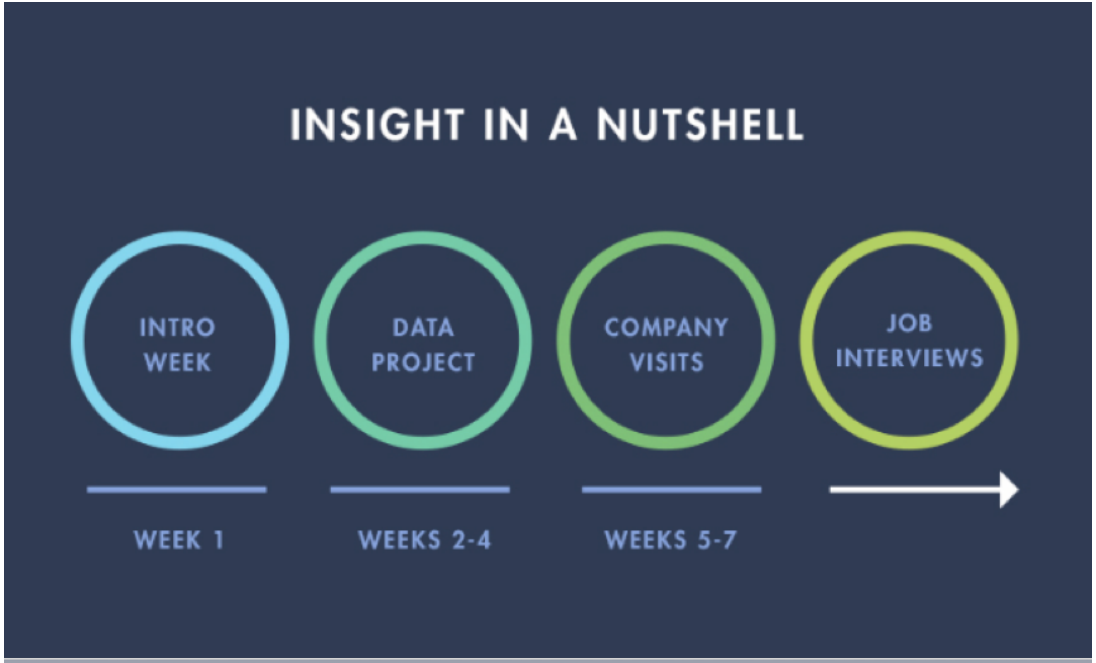
7 Weeks

$0

Full time

Need based scholarship

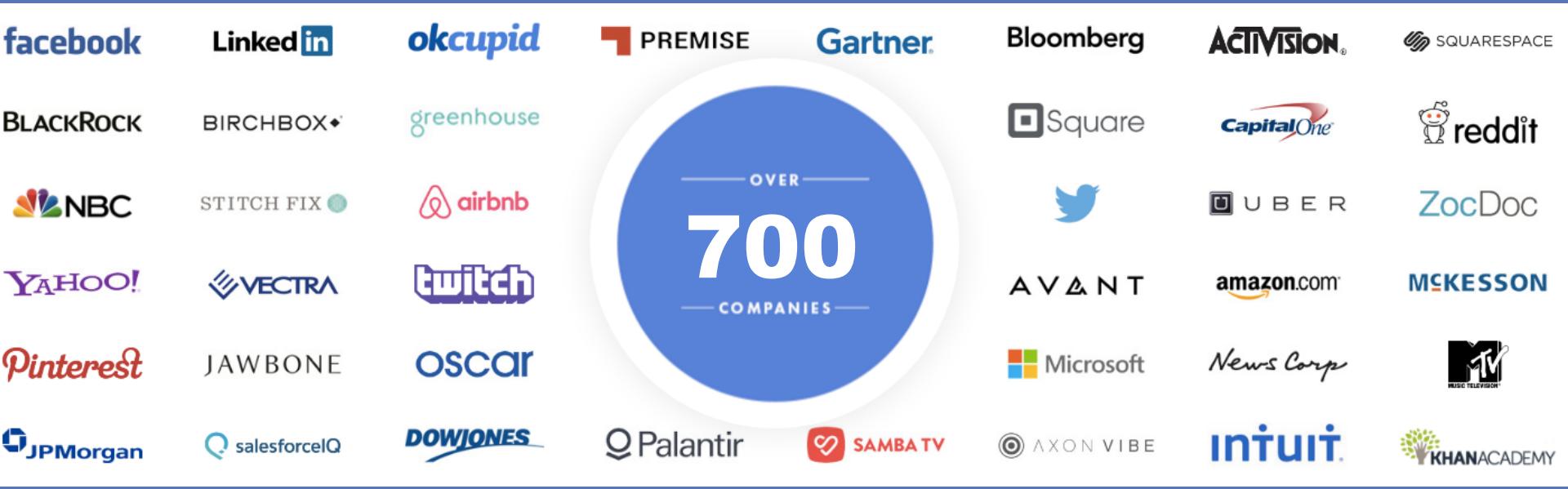
Our mission


INSIGHT IN A NUTSHELL
INTRO WEEK
DATA PROJECT
COMPANY VISITS
JOB INTERVIEWS
WEEK 1
WEEKS 2-4
WEEKS 5-7

Collaborate with other scientists

Alumni mentorship

3500+ Insight Fellows at



INSIGHT

PROGRAM

DATA SCIENCE
FOR PHDS

DATA ENGINEERING
FOR ENGINEERS

HEALTH ANALYTICS

ARTIFICIAL INTELLIGENCE
FOR PHDS AND ENGINEERS

LOCATION

+ REMOTE

Next Sessions Start May

Application Deadline: Coming Soon!

Current Rutgers fellows

Steven Boada
PhD, Astrophysics

Winter 2020 Data Science Fellow

Melissa Kazemi Rad
PhD, Atmospheric Sciences

Winter 2020 Data Science Fellow

Mohsen Ghassemi
PhD, Electrical and Computer Engineering

Winter 2020 Data Science Fellow

Admissions process at Insight

Step 1

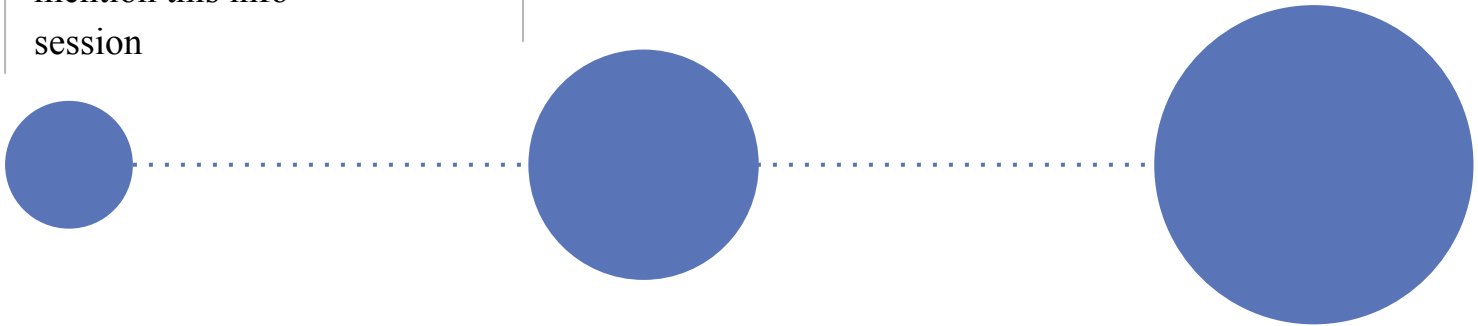
Apply today and mention this info-session

Step 2

15 minute initial interview

Step 3

30-minute video call with our team



How to contact me

Allen Chang

allen@insightdatascience.com

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