Careers in Data Science

Transitioning from Academia to Industry

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Insight Data Science

PIEP Workshop
October 8, 2015

INSIGHT

RICE

Georgia Institute of Technology

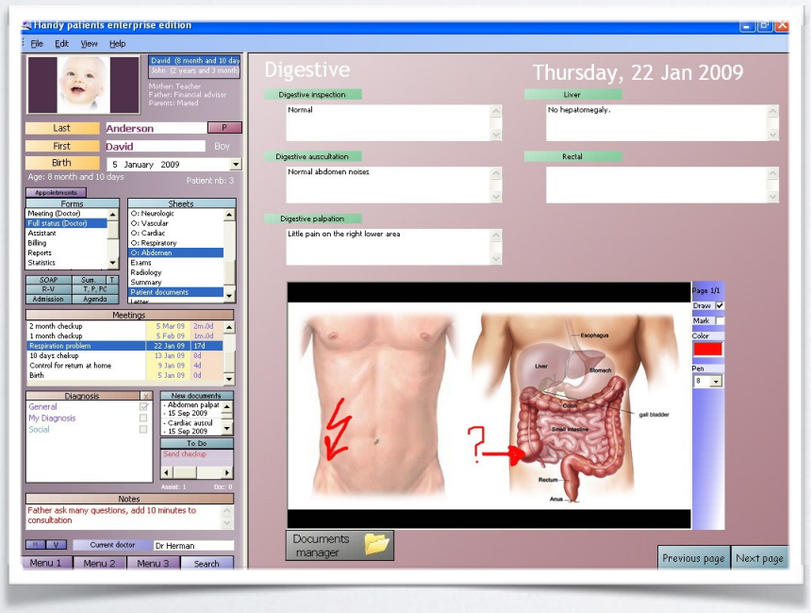
INSIGHT

Massachusetts Institute of Technology

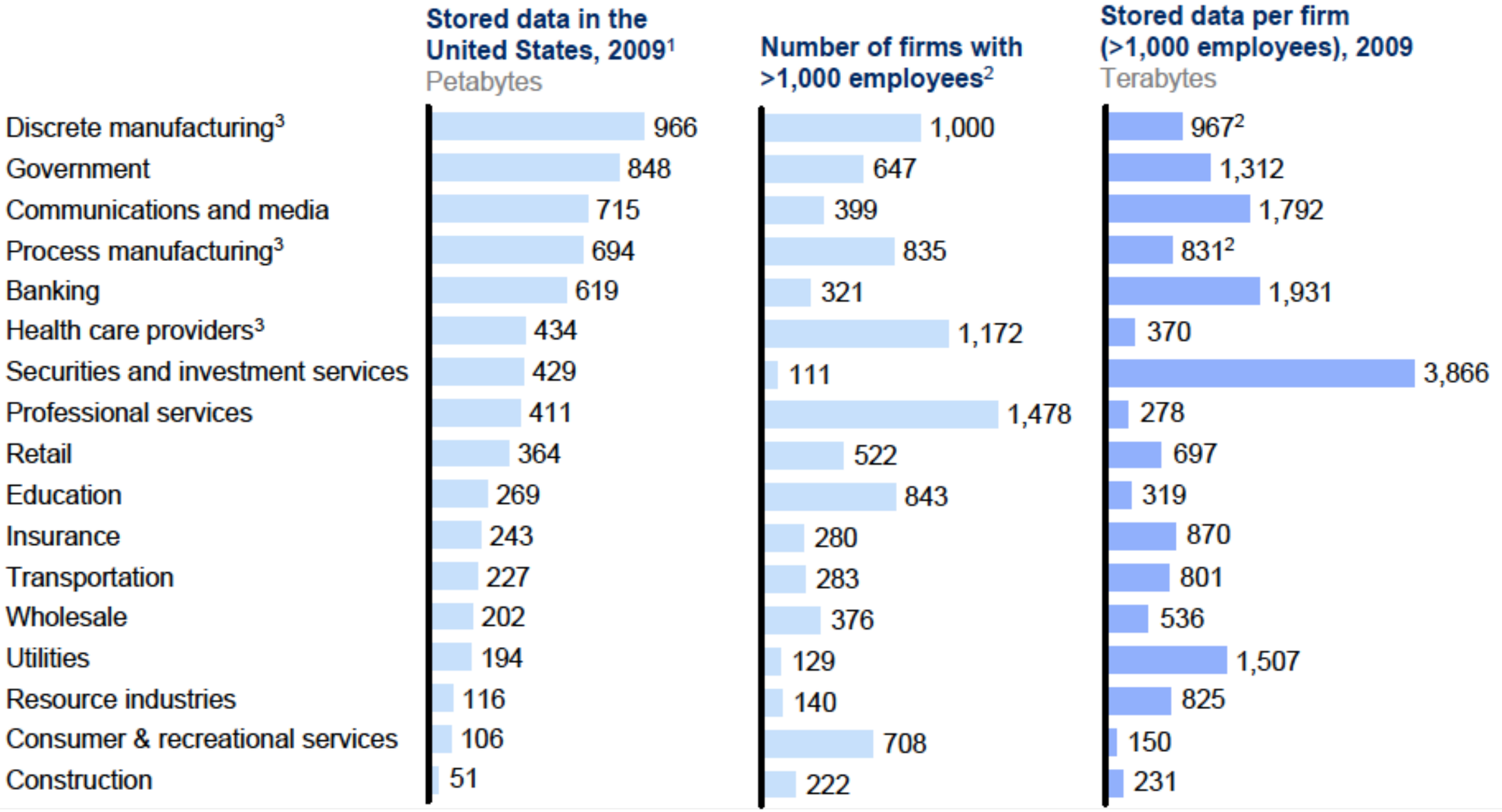
UNIVERSITY of HAWAI'I® MĀNOA

INSIGHT

Data Is Growing Exponentially



Companies in all sectors have at least 100 terabytes of stored data in the United States; many have more than 1 petabyte



SOURCE: IDC; US Bureau of Labor Statistics; McKinsey Global Institute analysis, 2011

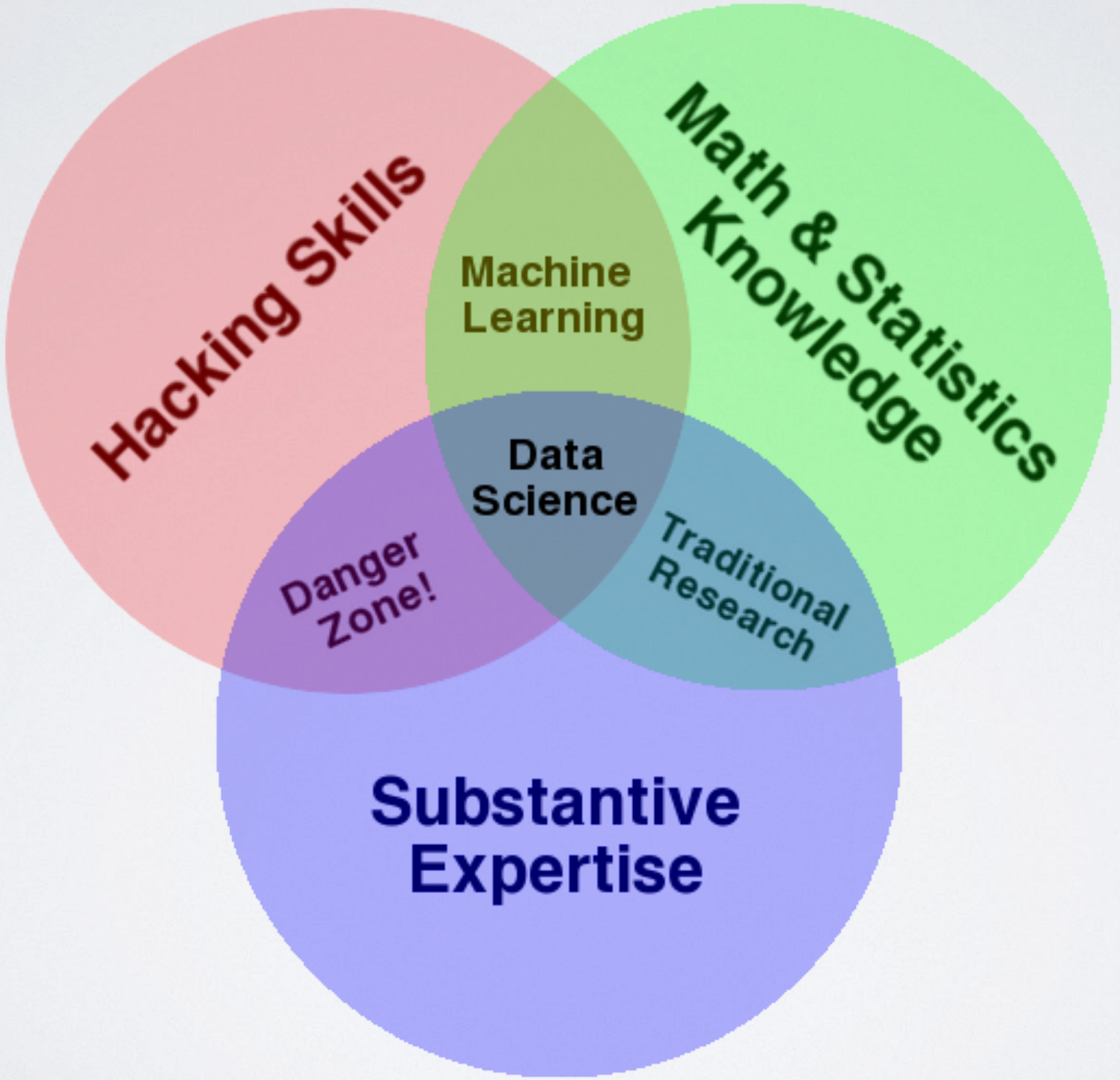
Job Trends from Indeed.com
"data science"
Percentage of Matching Job Postings
0.04
0.03
0.02
0.01
0
Jan '06
Jan '07
Jan '08
Jan '09
Jan '10
Jan '11
Jan '12
Jan '13
Jan '14
Jan '1
indeed
TM
one search. all jobs.

Source: McKinsey Global Institute analysis, 2011

"The best data scientists tend to be 'hard scientists,' rather than computer science majors."

– DJ Patil

WHAT IS DATA SCIENCE?



Drew Conway

THE GAP

1. Tools
2. Context
3. Pace
4. Priorities

BRIDGING THE GAP

PIEP POSTDOC INDUSTRY EXPLORATION PROGRAM

INSIGHT

EVIDENCE OF INTEREST

Build a data project.

Show off your:

Initiative

Technical Ability

Product Sense

GATHER INTEL

Do some informational interviews.

Ask questions like:

What is your data science stack/toolset?

Do you work on production-level tools?

How big is the data science team at your company?

CONNECT

Stay informed.

Check out:

Meetup groups (or start your own)

Hacker News

Data Science Weekly

LinkedIn

EVIDENCE OF INTEREST

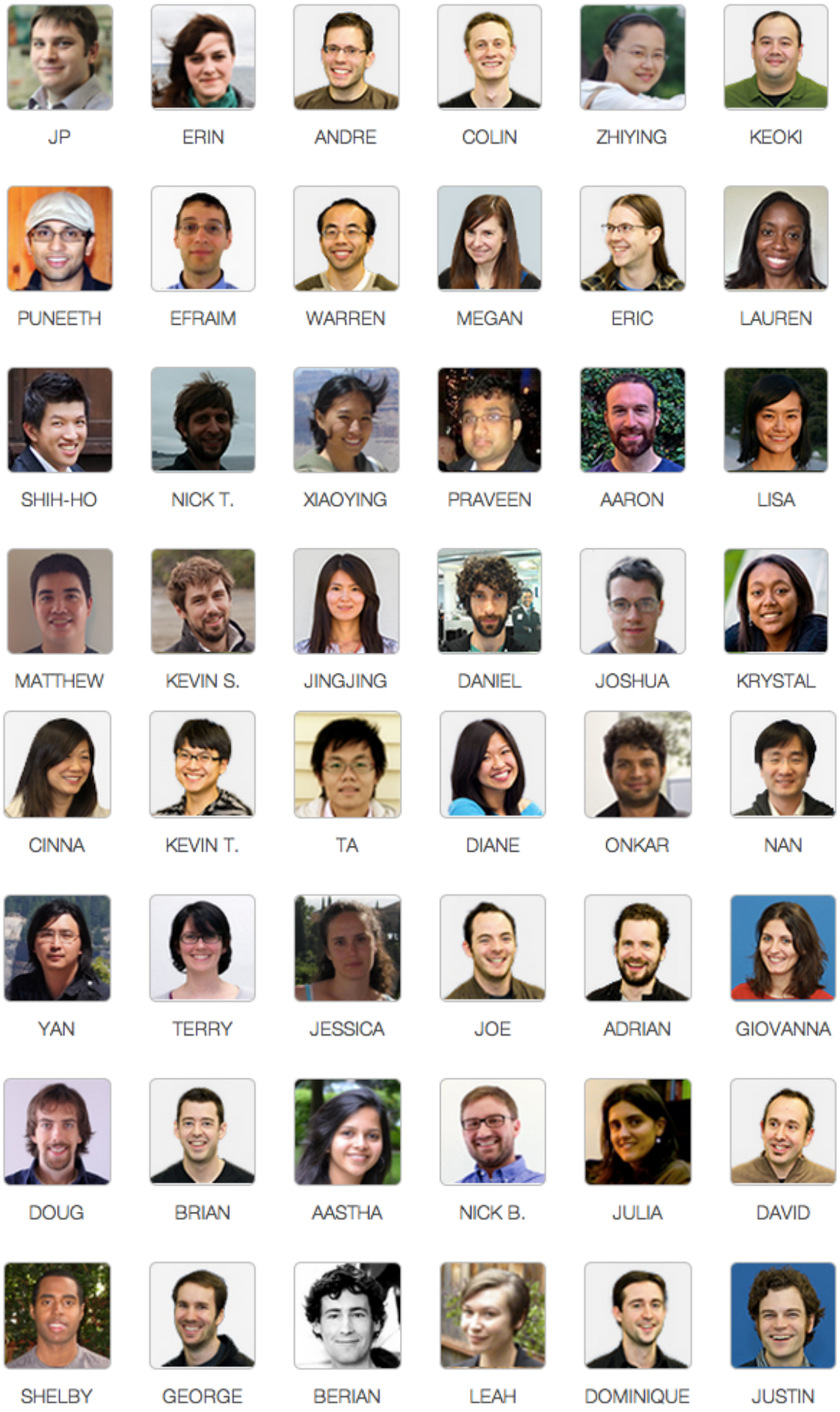
Build a data project

GATHER INTEL

Do some informational interviews

CONNECT

LinkedIn, Twitter, meetups



400+

Insight Fellows working as Data Scientists and Data Engineers

Insight Fellows are Data Scientists and Data Engineers at:

LinkedIn

facebook

twitter

Memorial Sloan-Kettering Cancer Center
The Best Cancer Care. Anywhere.

Microsoft

Square

Palantir

NBC

airbnb

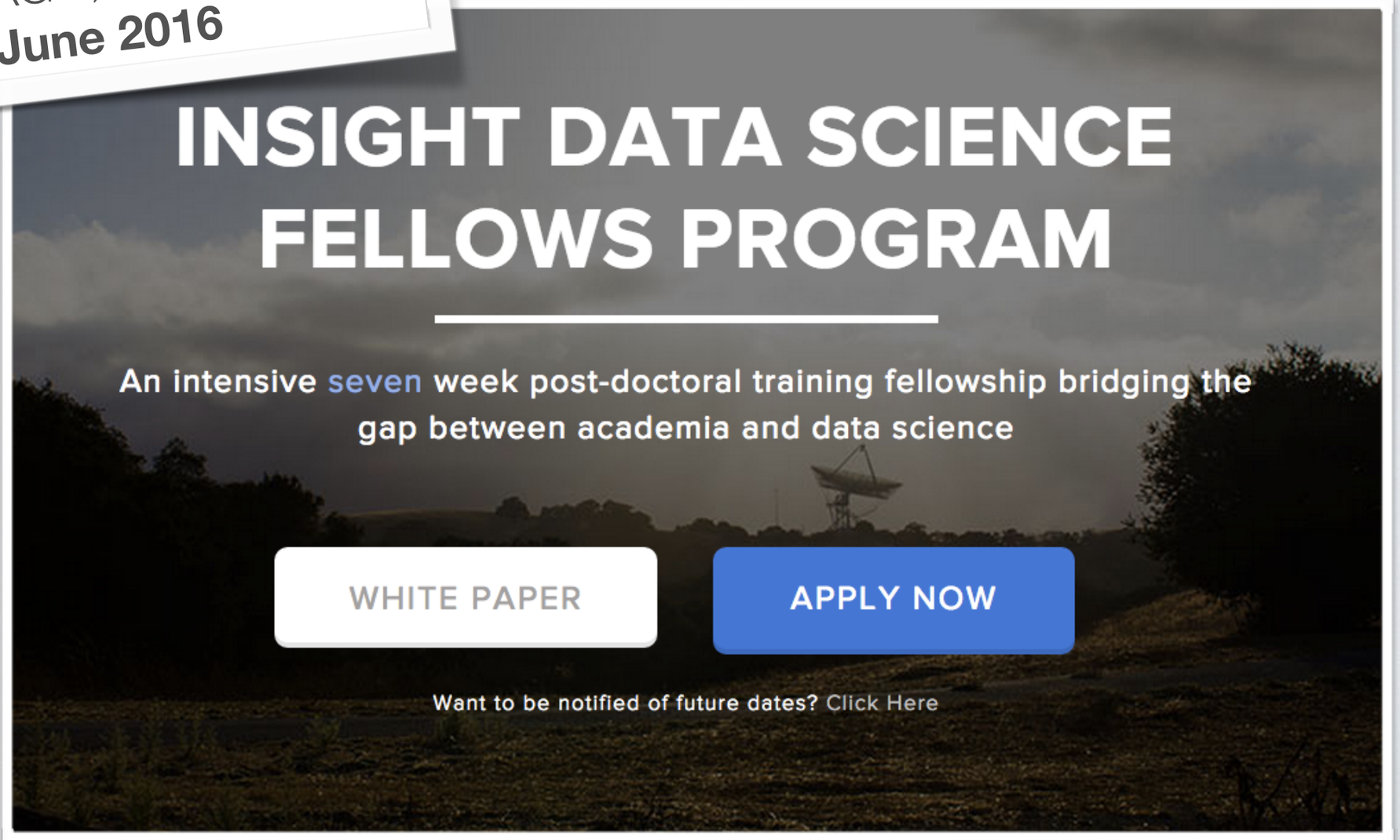
NETFLIX

intuit

tripadvisor

insightdatascience.com

Upcoming Sessions:
SILICON VALLEY
NEW YORK
SEATTLE, LA, DC, CHICAGO, & Other Cities
January 2016, June 2016



INSIGHT

Program Timeline

7 Weeks

4-8 Weeks

Week 1 — Weeks 2-4 — Weeks 5-7 → Job Interviews

Intro Week

Data Project

Company Visits

AREAS OF FOCUS

Product Analytics

Predictive Modeling (e.g. Risk, Sales)

Data Products

MANY QUESTIONS IN DATA SCIENCE

Khan Academy: Millions of math problems are attempted online per day. When is someone proficient? What is the best problem order?

The New York Times and The Wall Street Journal: What is the right payment model for journalism?

LinkedIn: Does this LinkedIn account correspond to a real person?

MANY QUESTIONS IN DATA SCIENCE

Netflix: What new shows should we make?

Memorial Sloan Kettering Cancer Center: Who is a good candidate for clinical trials?

Everywhere: What are some efficient ways in which the data can be stored, streamed, or accessed?

DATA PROJECTS

- lendinglounge.rodeo
- reviewskimmer.com
- hammerpricer.com
- beautifulcity.me
- routearoundcrime.com