Careers in Data

INSIGHT DATA SCIENCE FELLOWS PROGRAM
An intensive 7 week post-doctoral training fellowship bridging the gap between academia & data science

INSIGHT DATA ENGINEERING FELLOWS PROGRAM
An intensive 7-week professional training fellowship designed to be your bridge to a career in data engineering

INSIGHT HEALTH DATA FELLOWS PROGRAM
An intensive 7-week program for PhDs and MDs leading to a career in health data science

INSIGHT ARTIFICIAL INTELLIGENCE FELLOWS PROGRAM
An intensive 7 week professional training fellowship leading to a career in artificial intelligence
Data Science is a new field

Job trends from indeed.com
What is Data Science?

- Hacking Skills
- Math & Statistics Knowledge
- Machine Learning
- Data Science
- Traditional Research
- Substantive Expertise
- Danger Zone!

Drew Conway
Needed everywhere!

**HEALTH**  
Biogen  
Jawbone  
Memorial Sloan Kettering

**TRAVEL**  
AirBnB  
TripAdvisor

**EDUCATION**  
Khan Academy  
Creative Live  
Remind

**MEDIA**  
The New York Times  
NewsCorp  
MTV  
Netflix

**SOCIAL NETWORKING**  
Facebook  
Twitter  
LinkedIn

**APPAREL**  
StitchFix  
ThredUP  
Trunk Club

**INTERNET**  
Vectra  
Cisco

**FOOD**  
DoorDash  
Sprig  
Hampton Creek

**GAMING**  
Activision  
Blizzard  
Twitch
What do Data Scientists do?

Answer questions with data.

Obtain
Scrub / Clean
Explore
Model
Interpret

Hilary Mason and Chris Wiggins:
Data Science

...is a very broad term

- Data Products and Dashboards
...is a very broad term

- Machine Learning
Job of a Scientist

- Collect and clean data
- Use statistics knowledge and tools to discriminate between signal and noise
- Convey results to scientific community
Job of a Data Scientist

- Collect and clean data
- Use statistics knowledge and tools (coding) to discriminate between signal and noise
- Convey results to the team/company
- Make data-informed decisions that directly impact the product
Who are Data Scientists?

PhDs in quantitative sciences:

- Have data intuition
- Know the right questions to ask
- Statistics knowledge
- Strong coding skills
- Communication*

*results may vary
“The best data scientists tend to be ‘hard scientists,’ rather than computer science majors.”

- DJ Patil
Want to transition?

• What is data science to me and where do I fit in?
• Which industries am I interested in?
• What companies/institutes are at the intersection of those two things?
• How can I best prepare?
Challenges academics face when making the transition from Academia to Industry

**Tools**
- ROOT
- IDL
- MATLAB
- PostgreSQL
- Python
- Spark

**Pace**
- Results published O(once a year)
- Results needed O(weekly), MVP

**Product**
- Analysis for scientific community
- Results need to impact bottom line

**Vocabulary**
Thinking about DS?

How do you prepare for a career in data science?

Undergrads / early graduate students:

- Great time to start thinking about using open source tools
- eg: build software tools for your lab
- Start using GitHub to store your projects
- Organize public outreach events, practice explaining your research to non-experts
Thinking about DS?

How do you prepare for a career in data science?

Senior graduate students:

• Build a data product as a side project
  • Shows off your initiative, technical ability, product sense
  • Again…use industry standard tools like python and SQL!
  • Working with distributed computing already? Become familiar with frameworks like Apache Spark, Hadoop, Flink…etc
  • Start a blog
How to find out more

- Go to data science meetup groups and conferences
- Sign up for newsletters, read blogs
  - eg: Data Science Weekly, Hacker News, etc

[Image: eHarmony, Andre Iguodala, INSIGHT Data]

[Links: blog.insightdatascience.com]

[Text: TakeNote: Transforming online lectures into customized course notes]
How to find out more

- Connect with people on LinkedIn
- Do 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?
  
  What skills did you find were most valuable when you started?
  
  What is your day-to-day like?
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APPLY NOW  
READ THE WHITE PAPER

Want to be notified of future dates? CLICK HERE

Alex Smolyanskaya, Data Scientist at Stitch Fix, Insight 2015 Fellow

insightdatascience.com
Network of Insight Alumni
Including many from Cornell!
Insight Fellows are Data Scientists and Data Engineers at:

facebook  LinkedIn  okcupid  PREMISE  Gartner  Bloomberg  ACTIVISION  SQUARESPACE
BLACKROCK  BIRCHBOX  greenhouse  Square  CapitalOne  reddit
NBC  STITCH FIX  airbnb  Twitter  UBER  ZocDoc
YAHOO!  VECTRA  twitch  AVANT  amazon.com  MCKESSON
Pinterest  JAWBONE  Oscar  Microsoft  News Corp  mtv
JPMorgan  salesforceIQ  DOWJONES  Palantir  SAMBA TV  AXON VIBE  INTUIT  KHANACADEMY

Silicon Valley • New York • Boston • Los Angeles • Seattle + many others...
Upcoming Session: January 17, 2017
Application Deadline: October 24, 2016
Visit our website to apply or sign up for notifications
INSIGHT

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Work in a collaborative environment with other scientists, researchers, and engineers
Who are Data Scientists?

They come from many different backgrounds!

INSIGHT BY THE NUMBERS
The Alumni Split

- Physical Sciences: 42%
- Biosciences: 25%
- Engineering: 10%
- Mathematics: 9%
- Social Sciences: 7%
- Earth Sciences and Energy: 3%
- Computer Science: 3%
- Other: 1%
INSIGHT IN A NUTSHELL

- Intro Week: Week 1
- Data Project: Weeks 2-4
- Company Visits: Weeks 5-7
- Job Interviews

No raw extracted text available.
Thank you!

Apply and find out more on the web:

insightdatascience.com - insightdataengineering.com
insighthealthdata.com - insightdata.ai

Read our blog:

blog.insightdatascience.com

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