

# Data scientist: qualifications and skills

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# What does a data scientist do?

Design experiments

Pull and clean data

Analyze data

Communicate results



50 % visitors  
see variation A



Variation A



23%  
conversion



50 % visitors  
see variation B



Variation B



11%  
conversion

**What skills do they need?**

**Statistics (inference)**

**Machine learning (prediction)**

**Data analysis**

**Data communication**

About This Specialization

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## Data Science Specialization

From \$29

**Enroll**

Starts September 7, 2015

### COURSE 1

## The Data Scientist's Toolbox

Starts September 7, 2015

Commitment 1-4 hours/week

Duration 4 weeks

### About the Course

In this course you will get an introduction to the main tools and ideas in the data scientist's toolbox. The course gives an overview of the data, questions, and tools that data analysts and data scientists work with. There are two components to this course. The first is a conceptual introduction to the ideas behind turning data into actionable knowledge. The second is a practical introduction to the tools that will be used in the program like version control, markdown, git, GitHub, R, and RStudio.

### COURSE 2

# Background of data scientists

Statistics + application + engineering

Quantitative + data science transition

Software engineering + statistics

## Biostatistics

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The Department of Biostatistics seeks outstanding, highly-qualified candidates for tenure track faculty positions.

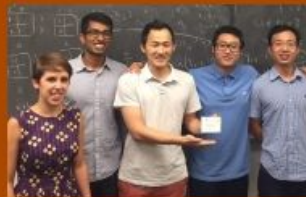
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# Solutions versus software



29  
MAY

# What statistics should do about big data: problem forward not solution backward

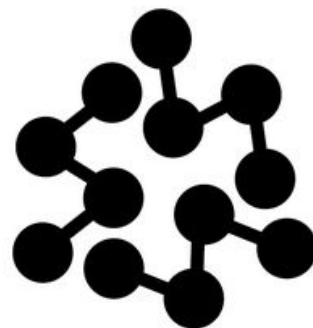
POSTED BY JEFF LEEK / UNCATEGORIZED



There has been a lot of discussion among statisticians about big data and what statistics should do to get involved. Recently [Steve M. and Larry W.](#) took up the same issue on their blog. I have been thinking about this for a while, since I work in genomics, which almost always comes with "big data". It is also one area of big data where statistics and statisticians have played a huge role.

A question that naturally arises is, "why have statisticians been so successful in genomics?" I think a major reason is the phrase I borrowed from [Brian C.](#) (who may have borrowed it from [Ron B.](#))

*problem first, not solution backward*




## RECENT POSTS

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[The Next National Library of Medicine Director Can Help Define the Future of Data Science](#)

## Key characteristics

Willing to find answers on their own

Unintimidated by new data

Willing to say I don't know

Friendly but relentless

friendly! +

