

Look ahead

Machine Learning with R

Basel R Bootcamp



May 2019

Hello Machine Learning Experts!

In 2 days, 6 sessions, and 16 hours you have come a long way.

	Sat, 11 May	Sun, 12 May
0900	Welcome	Recap
0930	What is ML	Optimization +Practical
1045	R for ML +Interactive	
1200	<i>Lunch</i>	<i>Lunch</i>
1300	Fitting +Practical	Features +Practical
1500		
1530	Prediction +Practical	Models +Practical
1715		Look ahead
1800	Wrapup	<i>Apero</i>

Welcome to the Data Revolution

"Machine learning will be the engine of global growth."

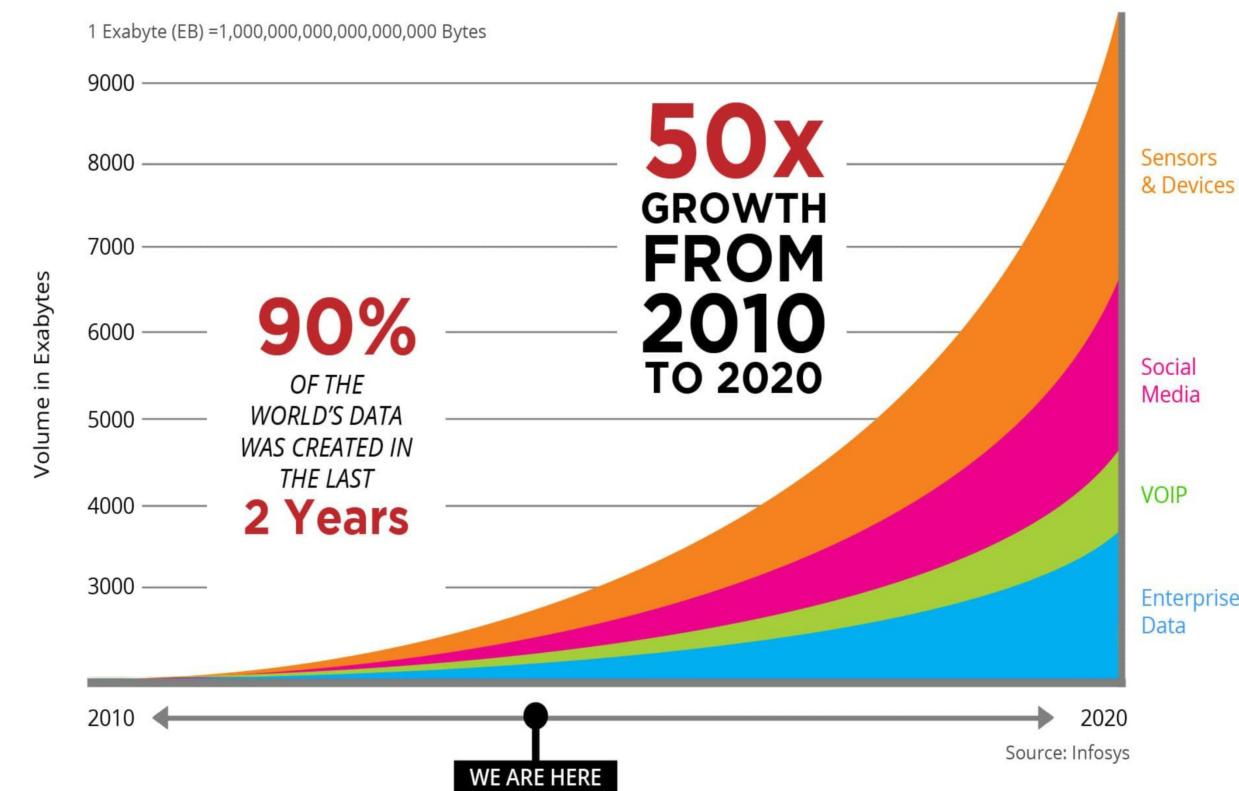
Financial times, July 2018

"Fuel of the future - Data is giving rise to a new economy."

The Economist, May 2017

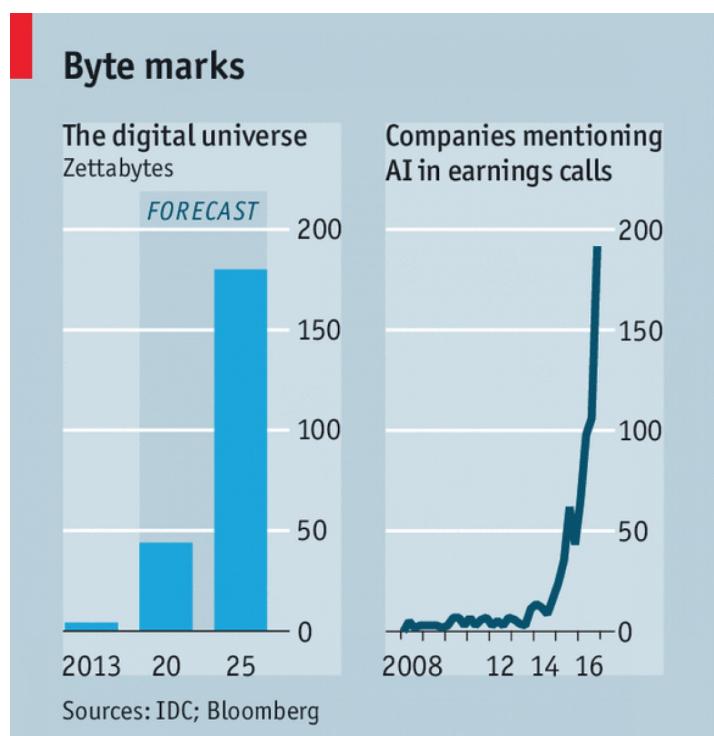
"Wie Big Data die Finanzmärkte verändern könnte"

NZZ, August 2018

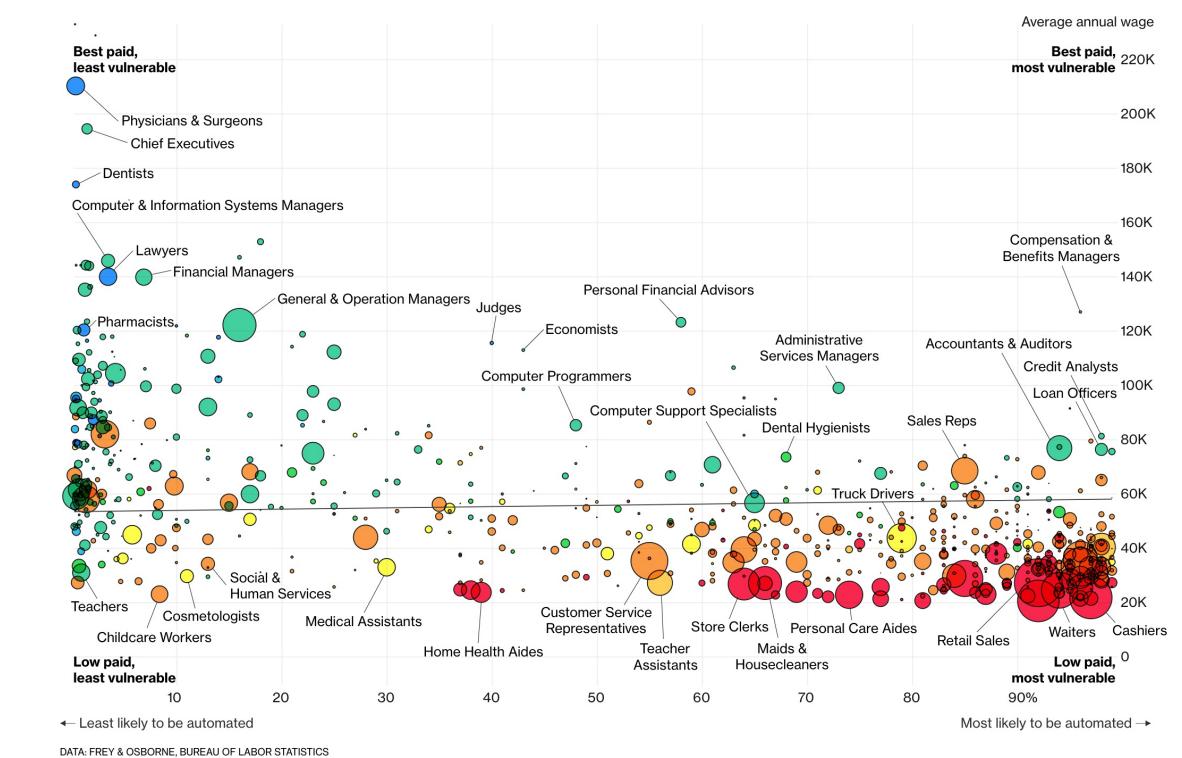


Changes to the economy

Businesses employ AI/ML



Jobs become obsolete



Repeating the past

A nerdy cartoon

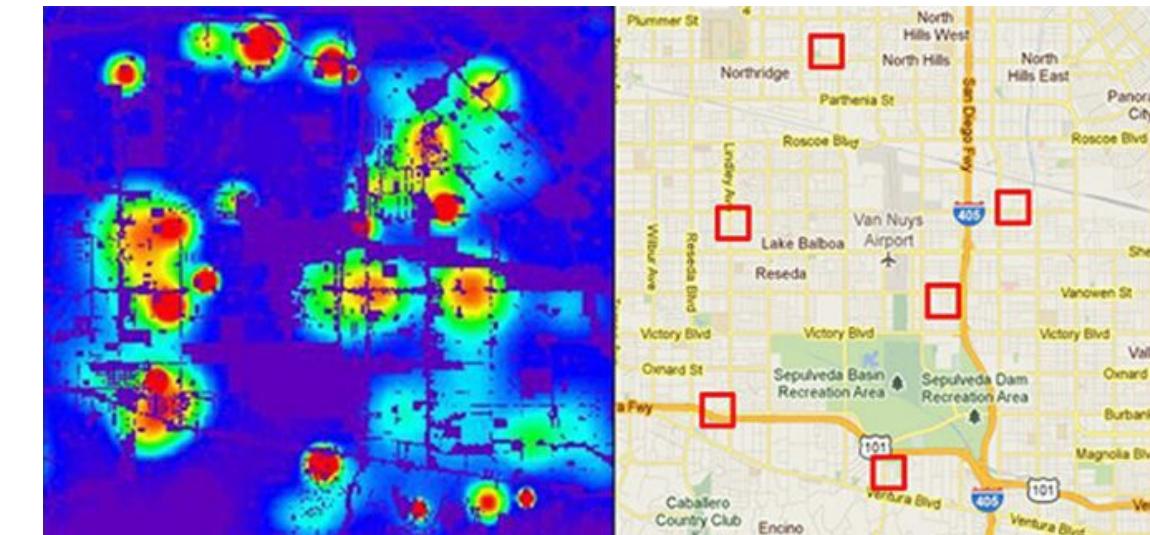


Thanks to machine-learning algorithms,
the robot apocalypse was short-lived.

from smbc-comics.com

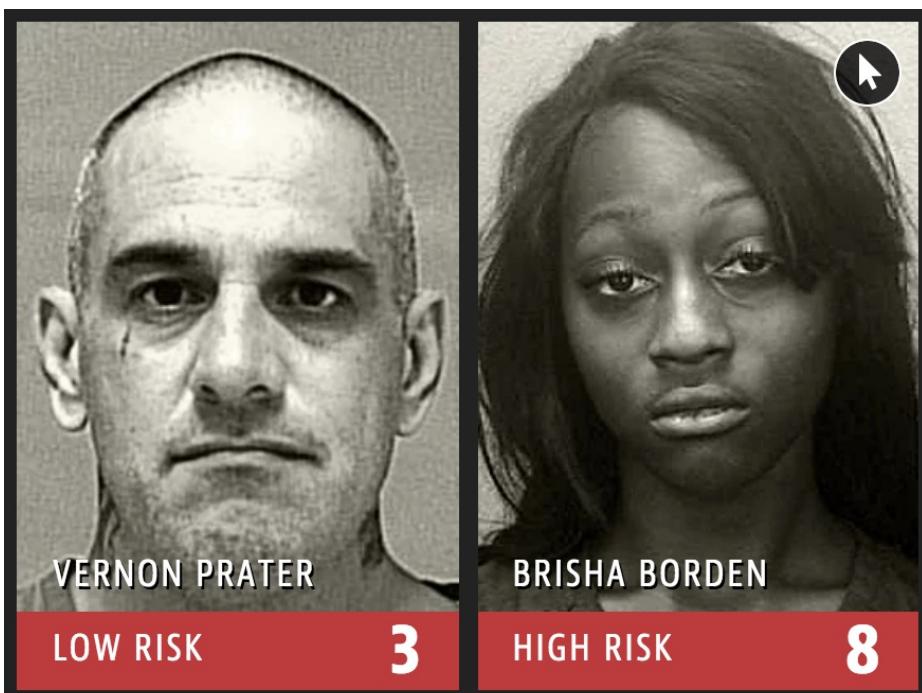
The real world: Predictive policing

The Economist
Harvard Civil Rights Review



Repeating the past

Recidivity risk scores



from [propublica.org](#)

Empirical evaluation

Pro Publica I, Pro Publica II

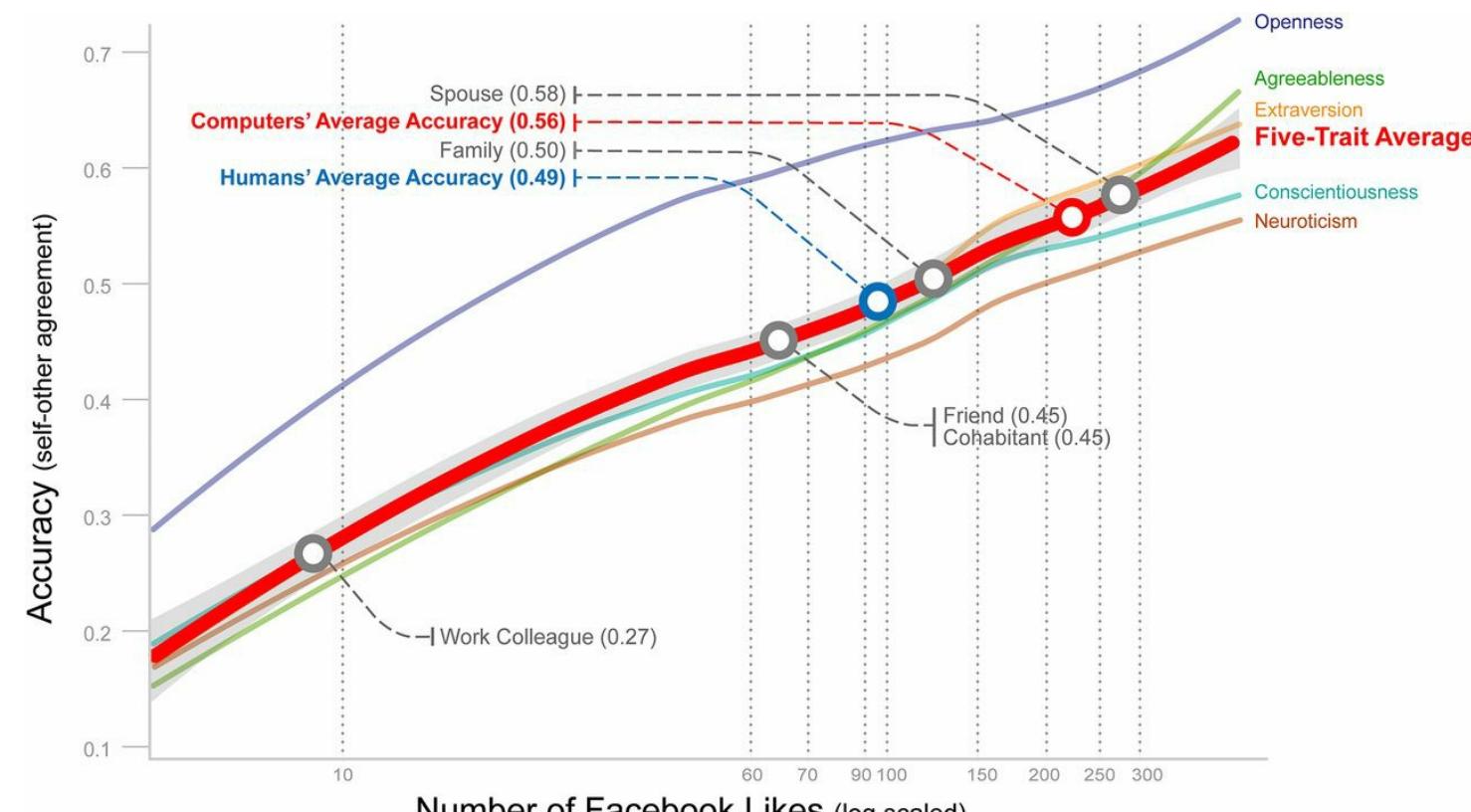
	WHITE	AFRICAN AMERICAN
Labeled Higher Risk, But Didn't Re-Offend	23.5%	44.9%
Labeled Lower Risk, Yet Did Re-Offend	47.7%	28.0%

from [propublica.org](#)

The end of privacy

"Most technologies have their bright and dark side [...] My personal opinion is that a machine's ability to better understand us would lead to improved consumer experience, products, etc... But imagine that we published a clone of youarewhatyoulike.com that simply predicted which of your friends was gay (or Christian or liberal or HIV-positive, etc); lynchings are not unlikely to follow..."

Michal Kosinski, Stanford University [\[Full text\]](#)



from [pnas.org](#)

What do you think?

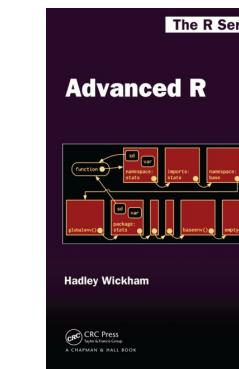
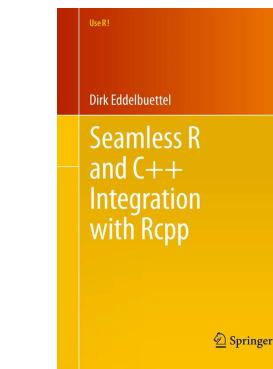
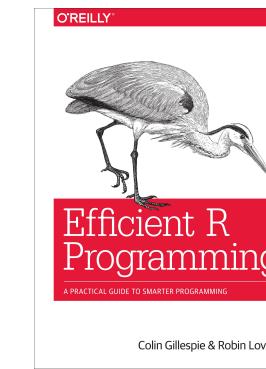
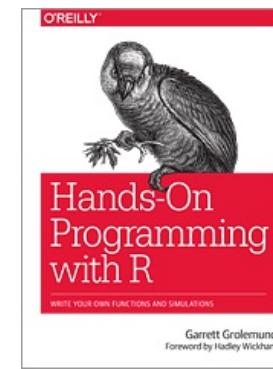
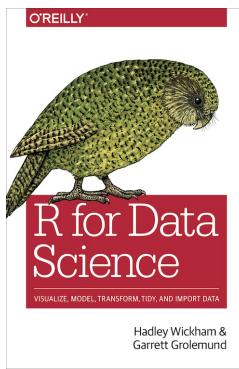
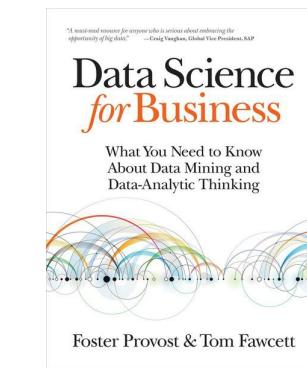
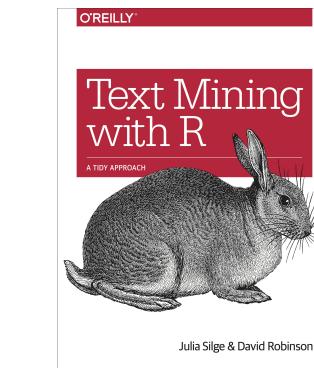
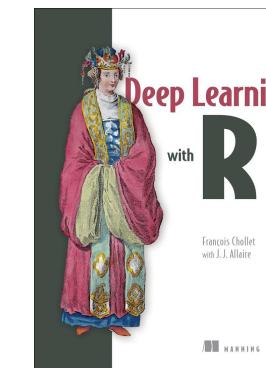
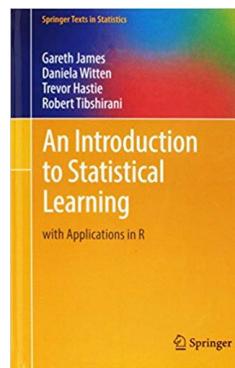
Next steps

1. *Practice*
2. *Read books*
3. *Consult websites*
4. *Support & consulting*
5. *Upcoming courses*



Books

Here is a very incomplete series of good books. They are ordered by complexity, beginning with user-friendly books on **learning statistics** in R and ending with books focusing on the more **advanced topics of the R language**.



Websites

The web is a great place to learn about R.

Best begin your journey with:

[Google](#) or [Rseek](#), which is a wrapper around google to maximize hits related to R. However, most of the time Google works just fine. Just be sure to add `r` to the search query.

Then you will be redirected to one of two pages

[R-bloggers](#) is a website on which R users inform each other on the newest developments. See, e.g., Nathaniel's [entry](#).

[Stackoverflow](#) is a website on which R users exchange problems and solutions to problems. Try post something yourself. You will be amazed by the turnaround.



Support & Consulting



Dr. Dirk Wulff

dirkwulff.org
github.com/dwulff
packages: `cstab`,
`mousetraps`, `memnet` `choicepp`



Dr. Nathaniel Phillips

nathanielphillips.com
github.com/ndphillips
packages: `yarr`,
`FFTrees`



Markus Steiner

github.com/mdsteiner
packages: `ShinyPsych`,
`EFAdiff`



Dr. Michael Schulte-M.

schulte-mecklenbeck.com
github.com/schultem

Upcoming courses

R for Data Science



2 days, June 1/2, 2019

Statistics with R



2 days, September 7/8, 2019

CAS Data Science



approx. April 2020 onwards

Please give us feedback



from medium.com

Basel R Bootcamp - Follow-up questionnaire

Please be so kind to take a few minutes and provide us with feedback for the Machine Learning with R bootcamp in 2019. In the first part you will have the chance to tell us what you think about the workshop in general. In the second part you can indicate which sessions you liked/disliked and why.

* Erforderlich

How did you hear about the bootcamp? *

- Google / Google Ad
- LinkedIn
- Advanced Studies website
- Friends and colleagues
- Facebook
- Sonstiges:

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Thank you! and one more thing...

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www.therbootcamp.com

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