

THE DATA SCIENCE RACE: ONE STATISTICS EDUCATOR'S PERSPECTIVE

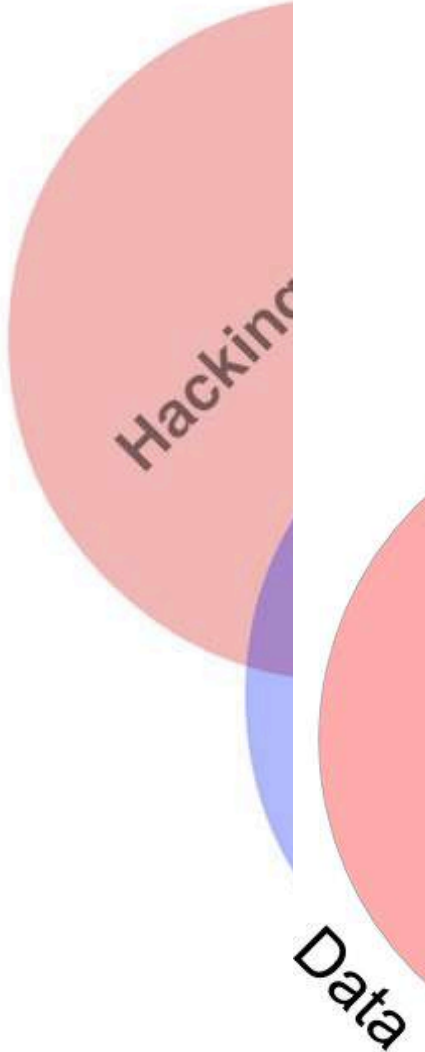


United States Conference on Teaching Statistics 2019

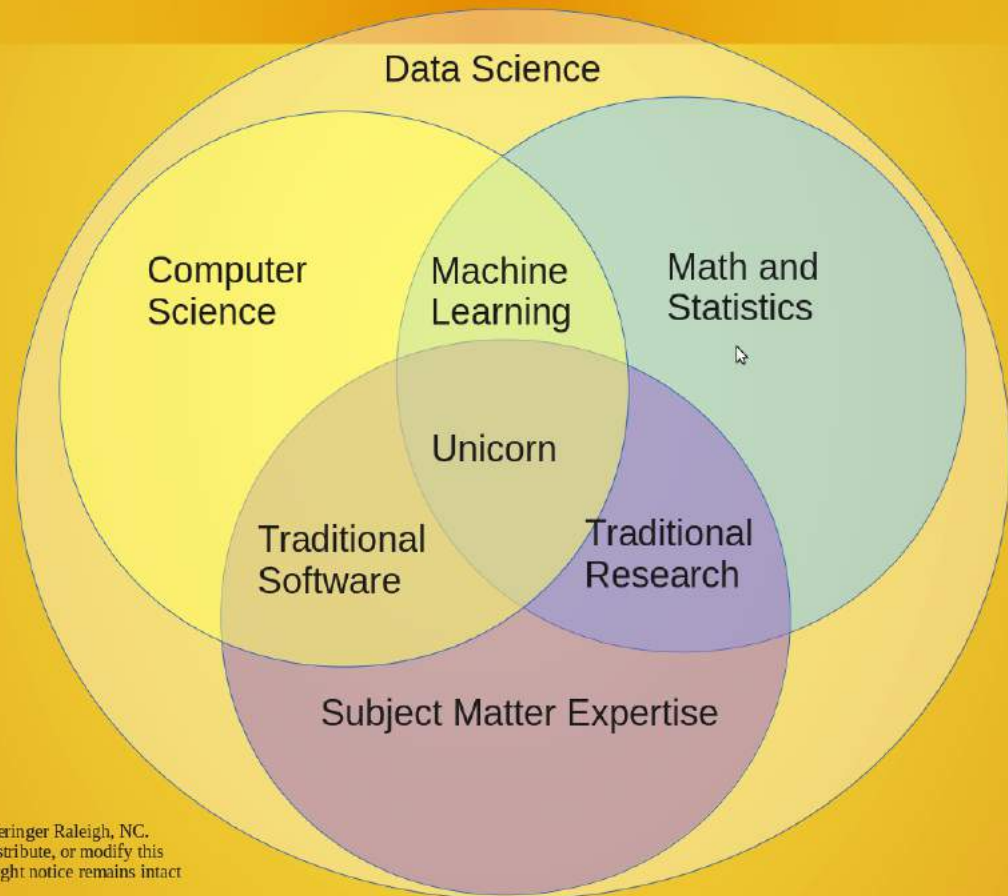


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WHAT IS DATA SCIENCE?



Data Science Venn Diagram v2.0



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WHAT'S MY ROI?

- **Computer Scientist**
 - Fast
 - Simple answer
- **Statistician**
 - Slower
 - Asks questions
 - Conditional, probabilistic range of values



DATA LIFE CYCLE

Generation

Collection

Storage

Security

Manipulation

Visualization

Analysis

Communication

Impact

DATA LIFE CYCLE

Generation

Collection

Storage

Security

Manipulation

Visualization ?

Analysis

Communication

Impact

Computer Scientist's View
of a Statistician's Role

SUPPORT




USCOTS has been made possible by:



Platinum Supporters

GitHub Education
GitHub Education

Google, Inc.
Google


Microsoft
 Microsoft

Gold Supporters

Codio
 **codio**

Intel

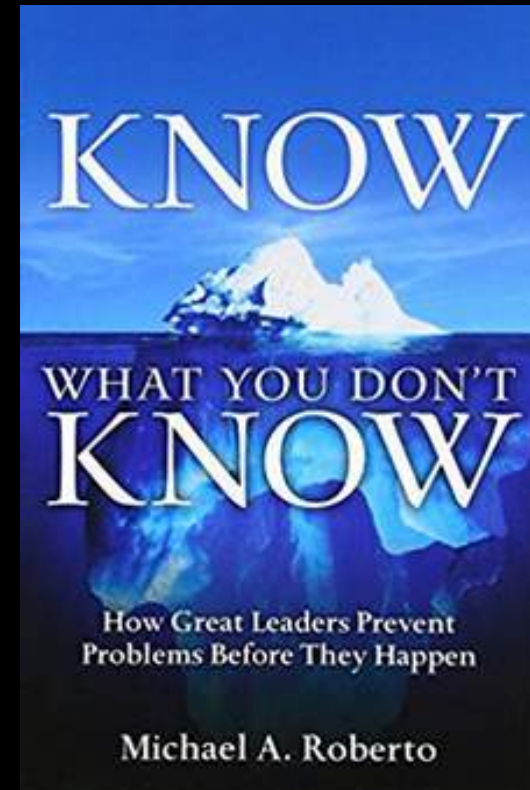

Oracle Academy
ORACLE
Academy

Turing's Craft
 **turingcraft**

zyBooks
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CHALLENGE -> OPPORTUNITY

- Know what you know
 - Descriptive Statistics
 - MV Thinking – Models, Data Viz
 - Programming Skills
 - Build Up Analysis / One & Done Fallacy
- Know what you don't know
 - Uncertainty, Inference
 - Bias (missing values/cases, processing)
 - Causal Inference / Causation
 - MV Thinking (missing variable) - SME
- Provide insight
 - Communication
 - Simple is sometimes best



What you know, you know,
what you don't know,
you don't know.
This is true wisdom.

--- Confucious

IN SUMMARY

- Quality statistics education for students
 - ...for yourself
 - ...for your peers

United States Conference on Teaching Statistics 2019

United States Conference on Learning Statistics 2019

United States Conference on Sharing Statistics 2019

