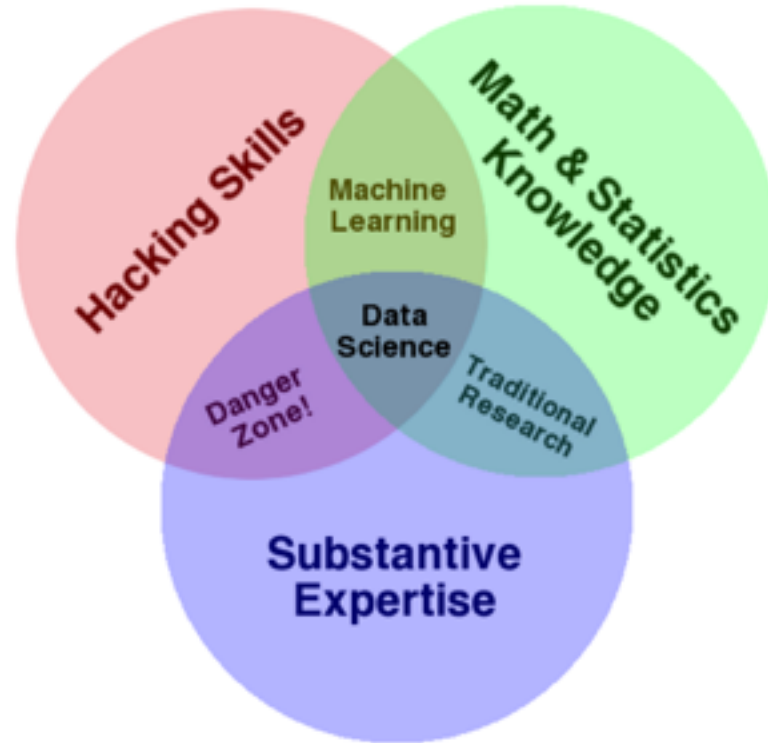


INTRO TO DATA SCIENCE

I. WHAT IS DATA SCIENCE?

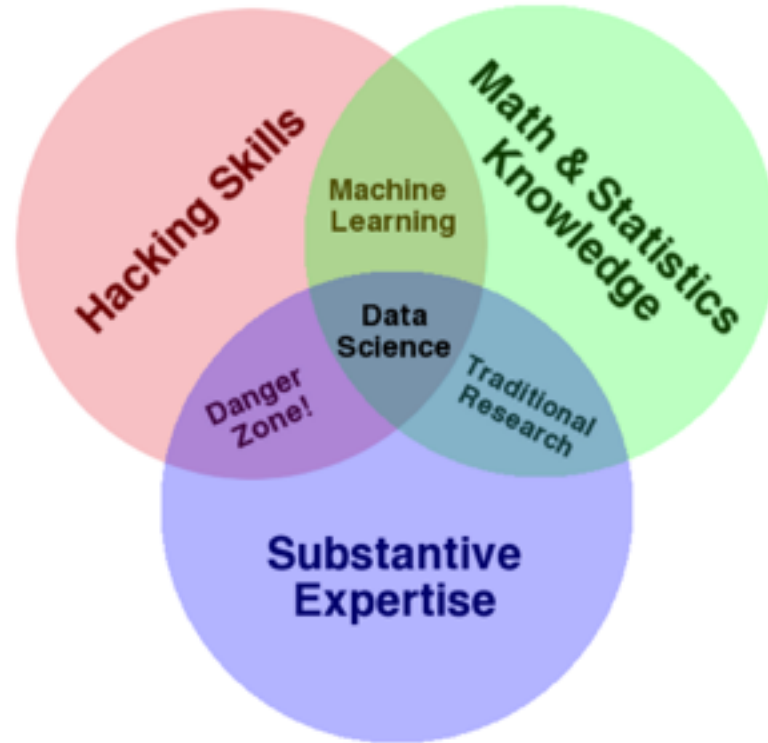
- **A set of tools and techniques used to extract useful information from data.**

- **A set of tools and techniques used to extract useful information from data.**
- **An interdisciplinary, problem-oriented subject.**



THE QUALITIES OF A DATA SCIENTIST

9



ONE MORE THING!

Communication
skills

source: <http://www.dataists.com/2010/09/the-data-science-venn-diagram/>

- **A set of tools and techniques used to extract useful information from data.**
- **An interdisciplinary, problem-solving oriented subject.**
- **The application of scientific techniques to practical problems.**

- **A set of tools and techniques used to extract useful information from data.**
- **An interdisciplinary, problem-solving oriented subject.**
- **The application of scientific techniques to practical problems.**
- **A rapidly growing field.**



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\$719.00 **\$179.00**

Kindle Fire 7", LCD Display, Wi-Fi, & Amazon Digital Navigation bar

★★★★★ (8,188)

\$159.00

Kindle 3rd Gen, 6" Display, Wi-Fi, & Amazon Digital Navigation bar

★★★★★ (4,478)

\$69.00

Kindle Fire HD 7", Galaxy Audio, & Amazon Digital Navigation bar

★★★★★ (4,917)

\$199.00

Kindle Fire HD 8.9", Galaxy Audio, & Amazon Digital Navigation bar

★★★★★ (5,470)

\$299.00

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★★★★★ (179,180)

\$50.00

Digital Cameras Real Sellers

Nikon COOLPIX W300 16 MP CMOS

★★★★★ (1,000)

Canon PowerShot SX600 HS 16.0 MP

★★★★★ (1,000)

Canon PowerShot A1000 HS 16.0 MP

★★★★★ (1,000)

Canon PowerShot Rebel T6 18 MP CMOS

★★★★★ (719)

Canon PowerShot SX700 HS 16.1 MP

★★★★★ (1,000)

Canon PowerShot SX600 HS 16.1 MP CMOS

★★★★★ (1,000)

Canon PowerShot Rebel T6 18.0 MP CMOS

★★★★★ (1,000)

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Samsung Galaxy Tab 2 (7 inch, Wi-Fi)

★★★★★ (2,407)

\$716.00 \$174.00

Kindle Fire 7" LCD Display, Wi-Fi, & Amazon-Regd. Revolution Inc.

★★★★★ (5,188)

\$199.00

Kindle 8" C Ink Display, Wi-Fi, & Amazon-Regd. Revolution Inc.

★★★★★ (4,278)

\$69.00

Kindle Fire HD 7" Galaxy Audio, & Amazon-Regd. Revolution Inc.

★★★★★ (4,297)

\$199.00

Kindle Fire HD 8.9" Galaxy Audio, & Amazon-Regd. Revolution Inc.

★★★★★ (4,478)

\$299.00

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★★★★★ (19,182)

\$60.00

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Digital Cameras Best Sellers

Nikon COOLPIX W300 16 MP CMOS

★★★★★ (1,000)

Canon PowerShot SX600 HS 16.0 MP

★★★★★ (1,000)

Canon PowerShot A2000 HS 16.0 MP

★★★★★ (1,000)

Canon PDS Rebel T5 18 MP CMOS

★★★★★ (1,000)

Canon PowerShot SX160 HS 16.1 MP

★★★★★ (1,000)

Canon PowerShot SX200 HS 12.1 MP CMOS

★★★★★ (1,000)

Canon PDS Rebel T5 18.0 MP CMOS

★★★★★ (1,000)

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HARDBONE

\$30 Off Instantly

Shop Now

What Other Customers Are Looking At Right Now

<p>SanDisk Ultra SDHC 16GB Memory Card</p> <p>4.9 (1,111)</p> <p>\$42.99</p>	<p>Samsung Galaxy Tab 2 (7-inch, Wi-Fi)</p> <p>4.5 (1,111)</p> <p>\$179.00</p>	<p>Kindle Fire (7" LCD Display, Wi-Fi, & Amazon Digital Navigation)</p> <p>4.8 (1,111)</p> <p>\$159.00</p>	<p>Kindle (7" C Ink Display, Wi-Fi, & Amazon Digital Navigation)</p> <p>4.9 (1,111)</p> <p>\$69.00</p>	<p>Kindle Fire HD (7" Glossy Audio, & Amazon Digital Navigation)</p> <p>4.9 (1,111)</p> <p>\$199.00</p>	<p>Kindle Fire HD (8.9" Glossy Audio, & Amazon Digital Navigation)</p> <p>4.9 (1,111)</p> <p>\$289.00</p>	<p>Amazon Gift Card - Credit</p> <p>4.9 (1,111)</p> <p>\$50.00</p>
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Digital Cameras Best Sellers

<p>Nikon COOLPIX W300 16 MP CMOS</p> <p>4.9 (1,111)</p>	<p>Canon PowerShot SX600 HS 16.0 MP</p> <p>4.9 (1,111)</p>	<p>Canon PowerShot A2000 HS 16.0 MP</p> <p>4.9 (1,111)</p>	<p>Canon PowerShot T5 16 MP CMOS</p> <p>4.9 (1,111)</p>	<p>Canon PowerShot SX160 HS 16.1 MP</p> <p>4.9 (1,111)</p>	<p>Canon PowerShot SX200 HS 12.1 MP CMOS</p> <p>4.9 (1,111)</p>	<p>Canon PowerShot T5 16.0 MP CMOS</p> <p>4.9 (1,111)</p>
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Other Formats & Versions		Amazon Price	New from	Used from
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\$24.99



Star Trek: Original Motion Picture Collection (Star Trek I, II, III, IV, V, VI + The Captain's Summit Bonus Disc) [Blu-ray] ~ William Shatner Blu-ray
[Reviews](#) (371)
\$53.56



Sin City (Two-Disc Theatrical & Recut, Extended, and Unrated Versions) [Blu-ray] ~ Jessica Alba Blu-ray
[Reviews](#) (933)
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What Other Items Do Customers Buy After Viewing This Item?



Star Trek Into Darkness (Blu-ray 3D + Blu-ray + DVD + Digital Copy) ~ Chris Pine Blu-ray
★★★★☆ (199)
\$24.99



Star Trek: Original Motion Picture Collection (Star Trek I, II, III, IV, V, VI + The Captain's Summit Bonus Disc) [Blu-ray] ~ William Shatner Blu-ray
★★★★☆ (571)
\$53.56



Sin City (Two-Disc Theatrical & Recut, Extended, and Unrated Versions) [Blu-ray] ~ Jessica Alba Blu-ray
★★★★☆ (933)
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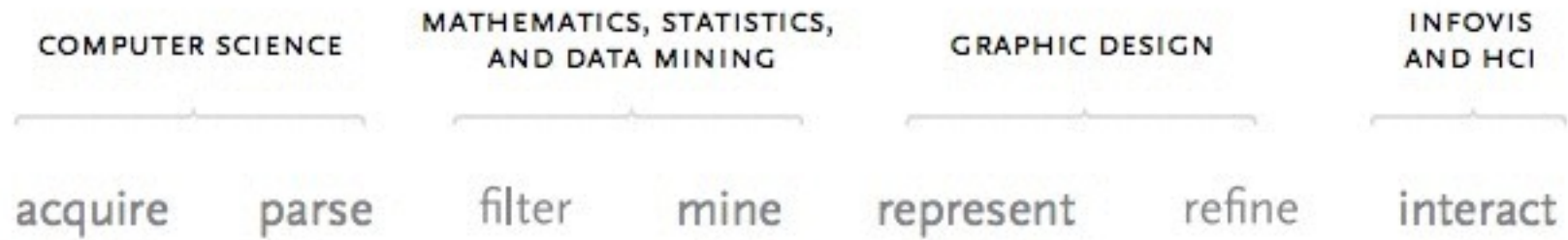
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II. THE DATA SCIENCE WORKFLOW

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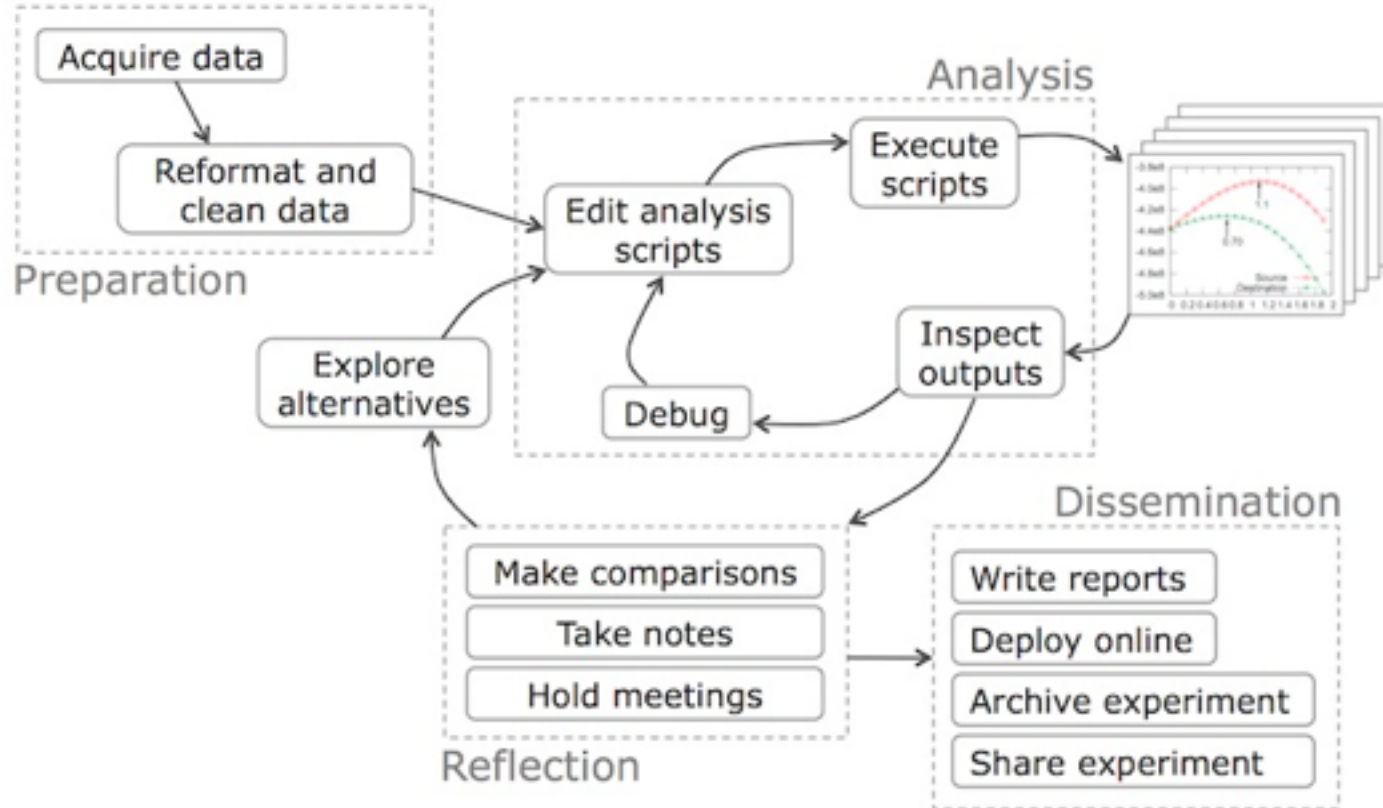


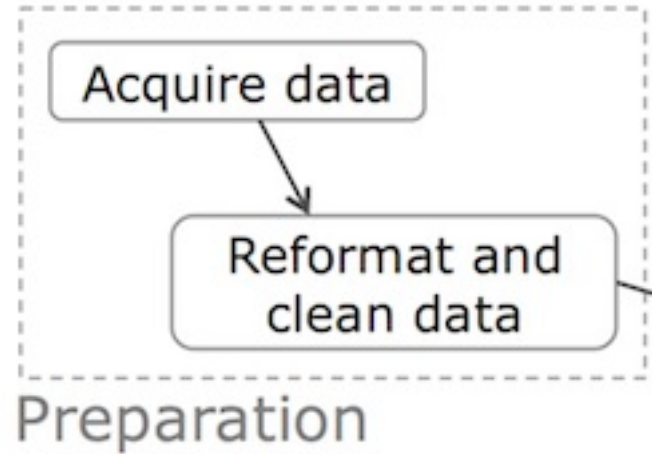
‣ From Jeff Hammerbacher:

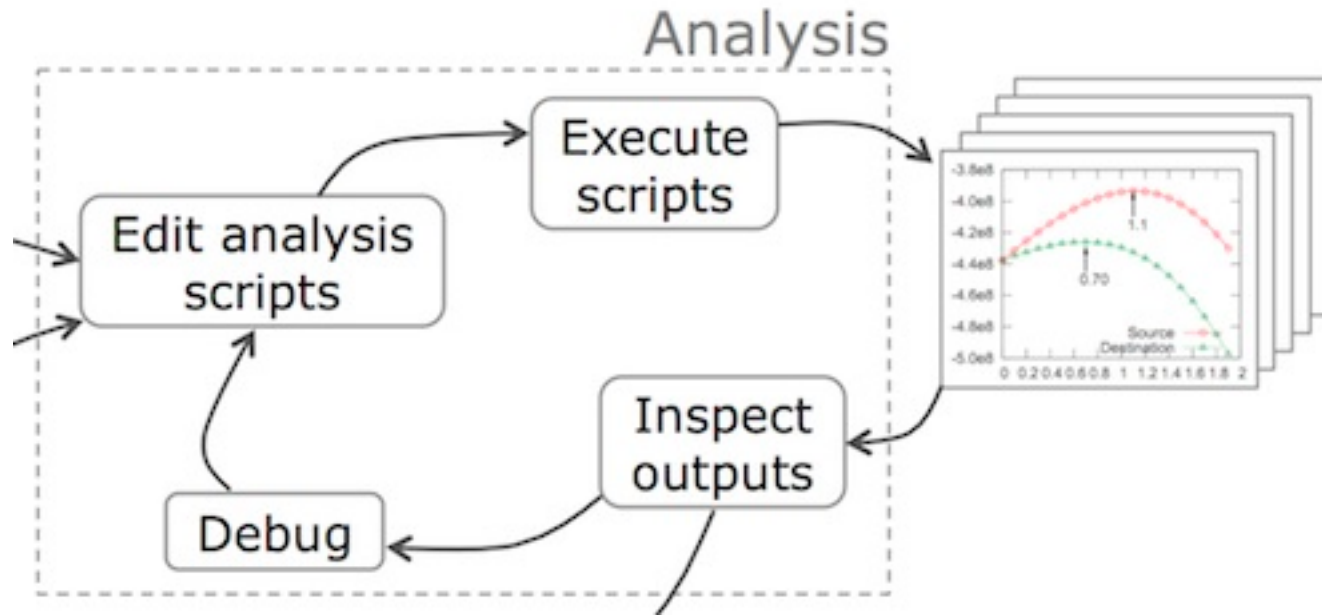
1. Identify problem
2. Instrument data sources
3. Collect data
4. Prepare data (integrate, transform, clean, impute, filter, aggregate)
5. Build model
6. Evaluate model
7. Communicate results

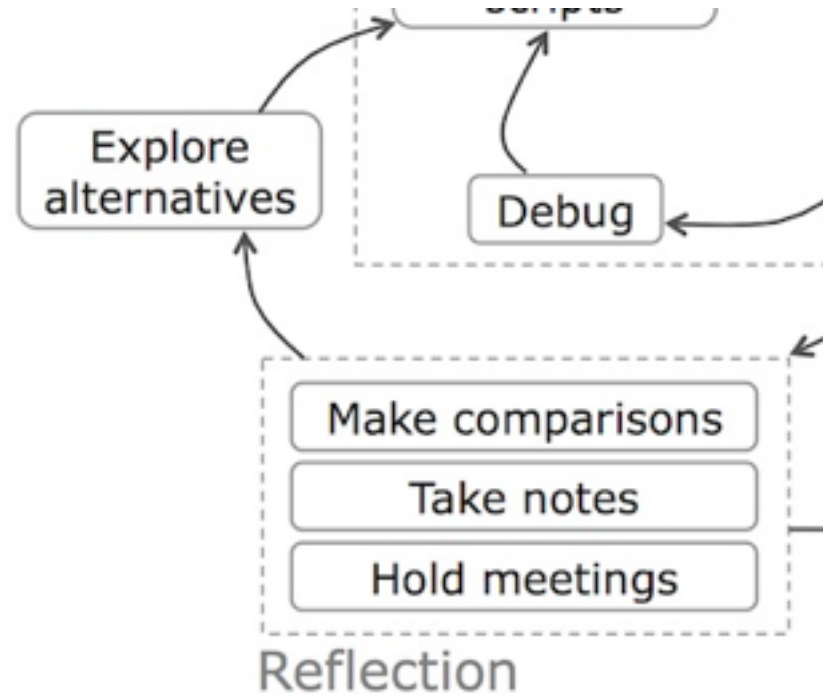
From Dataists Blog

1. Obtain
2. Scrub
3. Explore
4. Model
5. Interpret









III. WORKING AT THE UNIX COMMAND LINE

KEY OBJECTIVES

- NAVIGATE THE FILESYSTEM
- CREATE, MOVE, COPY, AND DELETE FILES & DIRECTORIES
- VIEW & SEARCH FILES
- EDIT & INTERACT WITH FILES
- COMBINE STEPS
- LEARN MORE

TOOLS

- LS, CD
- CAT, TOUCH, MV, CP, MKDIR, RM, RMDIR
- HEAD, TAIL, LESS, CAT, GREP
- VIM, AWK, SED, TR, SORT, UNIQU, WC
- PIPE (|)
- MAN, APROPOS

NOTE

Being comfortable
at the command line
makes your life
much easier!