# *August 28, 2018*

# COSC 4355 Knowledge Sources

* Dr. Eick’s Graduate Data Mining Course COSC 6355: <http://www2.cs.uh.edu/~ceick/DM/DM.html>
* Stanford University Statistics 202 Course—*Statistical Aspects of Data Mining*: <https://sites.google.com/site/stats202/> (uses the same textbook and R)
* Practical Data Science with R (Dr. Toti currently uses this book to teach Data Science to non-CS students): [https://www.amazon.com/Practical-Data-Science-Nina-Zumel/dp/1617291560/ref=sr\_1\_1\_sspa?ie=UTF8&qid=1535299157&sr=8-1-spons&keywords=practical+data+science+with+r&psc=1](https://www.amazon.com/Practical-Data-Science-Nina-Zumel/dp/1617291560/ref%3Dsr_1_1_sspa?ie=UTF8&qid=1535299157&sr=8-1-spons&keywords=practical+data+science+with+r&psc=1)
* R Programming Wiki Book: <http://en.wikibooks.org/wiki/R_Programming>
* John Hopkins Data Analysis Course: <https://www.coursera.org/learn/exploratory-data-analysis>
* Data Camp: Introduction to Revolution R Enterprise for Big Data Analytics: <https://www.datacamp.com/courses/introduction-to-revolution-r-enterprise-for-big-data-analytics>
* Recommended Textbook: P.-N. Tang, M. Steinback, and V. Kumar: *Introduction to Data Mining*, Addison Wesley, 2013 ( [Link to Book HomePage](http://www-users.cs.umn.edu/~kumar/dmbook/) )
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Motivation—why is taking this course important?

* <https://www.youtube.com/watch?v=t02BBmuiOOU> Show
* <https://www.bing.com/videos/search?q=big+data+analytics+videp&view=detail&mid=934703511FD7AF8C4372934703511FD7AF8C4372&FORM=VIRE> Show!
* Kenneth Cukier: Big data is better data: <https://www.youtube.com/watch?v=8pHzROP1D-w> Maybe show first 12:00
* [Is Data Analytics the Future of Everything? - Amul Mago | Brillio Imagine 2016](https://www.youtube.com/watch?v=fC_bjbvJGvs): <https://www.bing.com/videos/search?q=why-data-analytics-is-the-future-of-everything&&view=detail&mid=3BF741CF9F6B05DFA3CE3BF741CF9F6B05DFA3CE&&FORM=VDRVRV>

Big Data and the Future of Data Analytics

* <https://www.youtube.com/watch?v=NTMkc0bLRlI>
* <http://databoard.ft.com/>
* <http://bigthink.com/experts-corner/the-future-of-prediction-predictive-analytics-in-2020>

Specific Video On Particular Tasks

* Top data scientist D J Patil's Tips to Build a Career in Data: <https://www.bing.com/videos/search?q=top+data+sciece+videos&view=detail&mid=294CBDC25A05EA56880D294CBDC25A05EA56880D&FORM=VIRE>
* [Gigs: A day in the life of a data scientist](https://www.youtube.com/watch?v=EaptTxhh6sM): <https://www.bing.com/videos/search?q=top+data+sciece+videos&&view=detail&mid=2F31377A5EE1F5ED5E122F31377A5EE1F5ED5E12&&FORM=VDRVRV>
* [What does a data analyst actually do?](https://www.youtube.com/watch?v=eTN5dGanB5U) <https://www.bing.com/videos/search?q=top+data+sciece+videos&&view=detail&mid=0D4974741FBA094EB03A0D4974741FBA094EB03A&rvsmid=2F31377A5EE1F5ED5E122F31377A5EE1F5ED5E12&FORM=VDQVAP>
* The beauty of data visualization - David McCandless: <https://www.youtube.com/watch?v=5Zg-C8AAIGg> Maybe watch the first 12 minutes

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<https://www.youtube.com/watch?v=32o0DnuRjfg>