BUAD621: Decision Analytics & Visualization

Day 1: The Journey Begins

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Your Guide

"Adam"

UNIVERSITY OF DELAWARE.

RUTGERS
THE STATE UNIVERSITY OF NEW JERSEY

SIMON
GRADUATE SCHOOL OF BUSINESS
University of Rochester

University at Buffalo
The State University of New York

Adam Fleischhacker

@preposterior

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Your Guide

"Adam"

Adam Fleischhacker

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The Business Analyst's Guide to Business Analytics

The Business Analyst's Guide to Business Analytics

Available at:
http://causact.updog.co
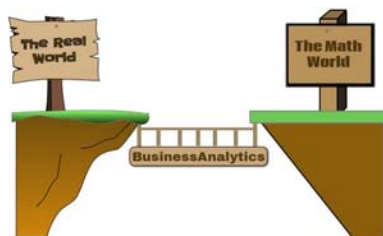
Intro to Business Analytics In The R-Ecosystem

Featuring R, RStudio, the Tidyverse, Graphical Models, Bayesian Inference, and Greta.

Adam Fleischhacker

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Who are you? (tell me one)

Interesting Tidbit   *Favorite Company*

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Data Science Venn Diagram

Source: Stephan Kolassa (https://bit.ly/2BjqdBt)

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Slide 6

Course Website

http://www.udel.edu/canvas
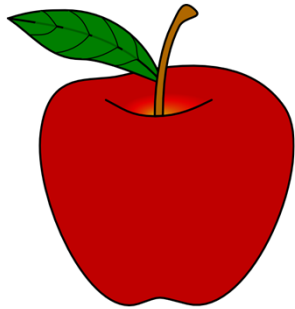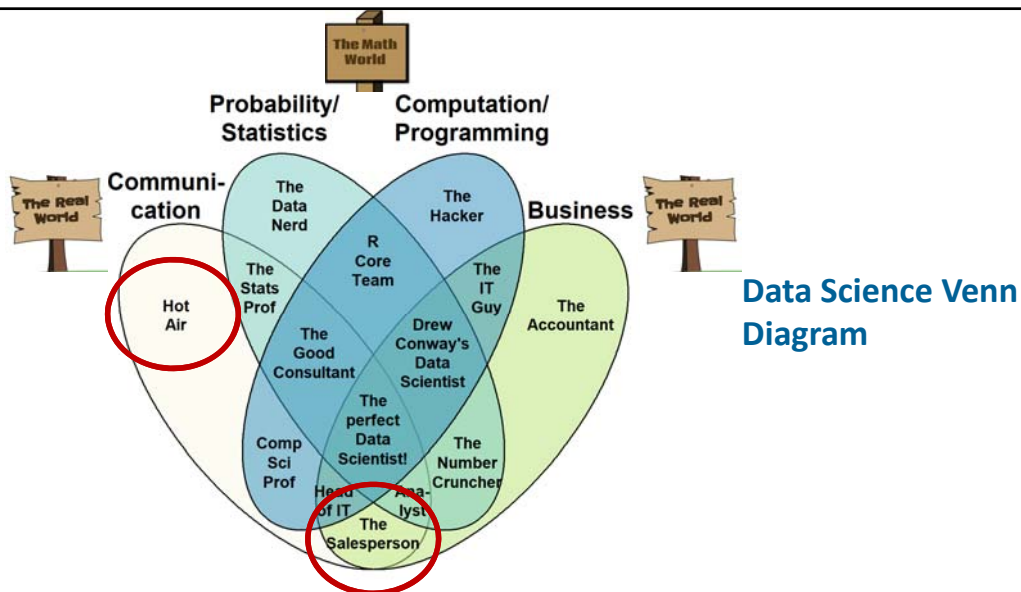
19J-BUAD621-172 › Modules

2019 Summer

Home
Modules
Discussions
Grades
Announcements
Attendance
Assignments
Collaborations
Conferences

▾ Module 0 - Getting Started

🔗 Unfinished Draft of Syllabus.pdf

🔗 Module0 - Course Prep - Relevant Book Chapters.pdf

▸ WEEK1 HW - Computing & Data Manipulation Due @11pm

Other Notes:

- Classes are recorded.
- Office hours – Tues. after class
- Slides posted evening prior to class

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Slide 7

Computing*

R

R Studio®

How Big Companies Are Using R for Data Analysis

Analytics Trends Industry Level

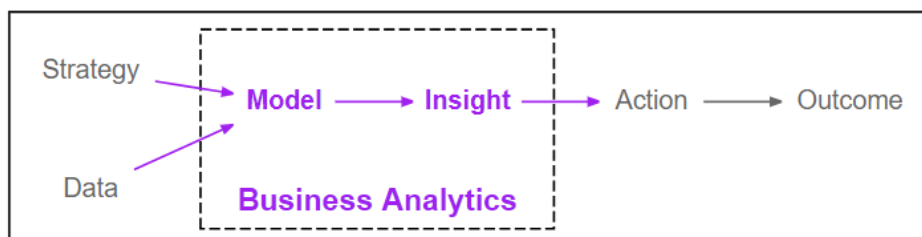* Laptops Are Required

Source: https://www.northeastern.edu/levelblog/2017/05/31/big-companies-using-r-data-analysis/

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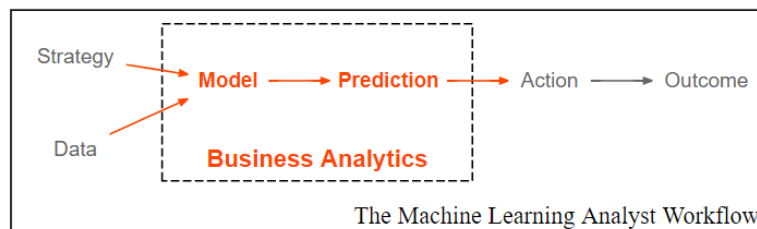
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Release The BAW

Strategy → Model → Insight → Action → Outcome

Data

Business Analytics

Release The BAW

Strategy → Model → Prediction → Action → Outcome

Data

Business Analytics

The Machine Learning Analyst Workflow

Grading

Weekly HW Quizzes	Final "Client" Report or Presentation	Participation
80%	**10%**	**10%**

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Grading

HW Quizzes

80%

- Due Each Wednesday @ 11pm

- Four Attempts at Quantitative Questions
  - *Note: questions will have subtle change with each attempt*

- Lab Hour (Tuesday's 7pm-8pm)
  - *Start HW early. All HW material will be covered by EOD of prev. Thursday*

- Four missed points are forgiven
  - *(no other excuses please)*

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Grading

- 1 - 3 Team Members

- Due during or slightly after final week of class
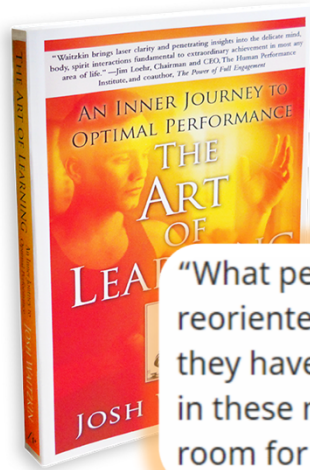
Final "Client" Deliverable

10%

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Grading

- Attendance

- Zero Cellphone Glances

- Focused Laptops

- Engaged Minds

Participation

10%

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6/11/2019

Productive Struggle

Productive struggle is a state of mind where obvious solutions and simple answers to a problem seem elusive, yet despite this, one maintains faith that flexible thinking and perseverance will yield positive outcomes.

"What people don't realize is that world-class performers have reoriented their relationship to suffering, to the point of resistance, they have learned to embrace it, they've learned to see the beauty in these moments where there's pain because there's incredible room for growth." - Josh Waitzkin (Tim Ferris Show Ep.2)

Productive Struggle
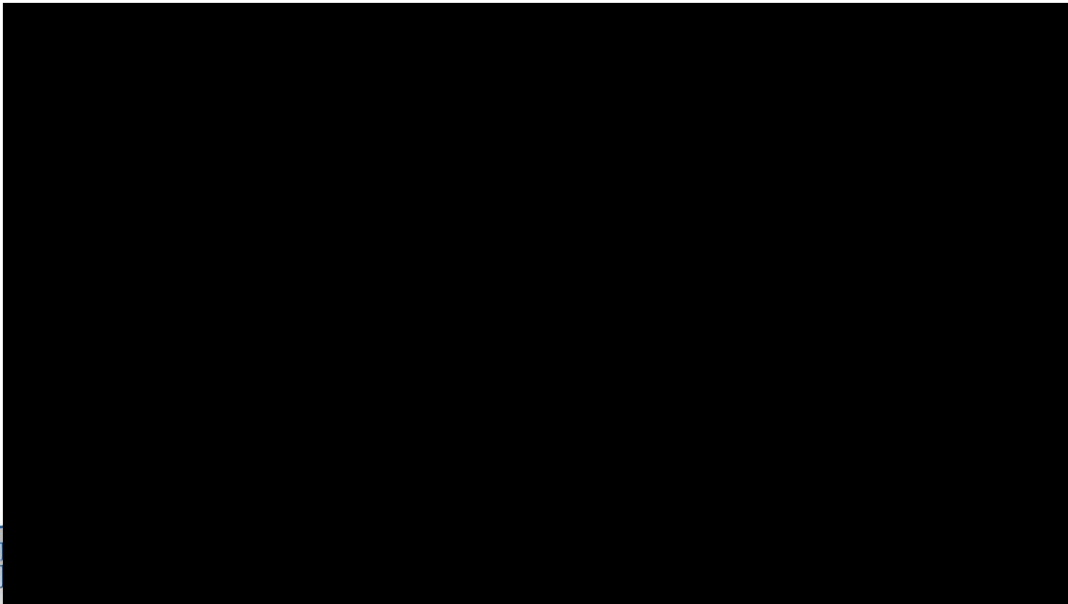
Data Science as Execution of Strategy

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Key Idea

Strategy sets a destination …. are you helping?

"Rowing harder does not help if the boat is headed in the wrong direction. "
- Kenichi Ohmae, Partner @ McKinsey, HBR 1989

Francois Chollet

Stop Chasing Buzzwords

Too many people in the field of AI are chasing the latest fashions. My advice: keep your eyes on the fundamentals, focus on the long-term challenges. The important questions are still the same today as they were 20 years ago.

10:36 PM - 10 Aug 2018

Ask the right questions

> **Savage Jim** @jim_savage_ · 6h
> This is excellent. Disagree on one dimension: the back door to come in is big-S Science, not code. I see bajillions of tooled-up junior DSists who ask the wrong questions. Teams need scientists AND engineers.
>
> > **Vicki Boykis** @vboykis
> > New blog post: For the past couple years, I've been telling people who ask me for advice not to go into data science. Here's why: The data science job market is way oversaturated. Here's what they should do instead.
> > veekaybee.github.io/2019/02/13/dat...

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Focus on Strategy First

> **Savage Jim** @jim_savage_ · 23 Oct 2018
> Years ago I worked at a government agency that should have known better. They were trying to build an algo to thin the thousand applications to its grad program.
>
> The "success" label wasn't whether the person was a good hire, only that the person was offered a job. :-/ twitter.com/davegershgorn/...

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Schedule

Schedule (subject to change)

Date	Module #	Class Topic
06/11/19	1	Motivating the class, Introduction to the R-Ecosystem, Manipulating Data Intro
06/13/19	1	Manipulating Data + Data Viz Intro
06/18/19	2	Data Visualization
06/23/19	2	Representing Uncertainty
06/25/19	3	Decisions Under Uncertainty
06/27/19	3	Joint Distributions
07/02/19	4	Bayesian Updating
07/04/19	4	Probabilistic Graphical Models
07/09/19	5	Multi-Level Modelling
07/11/19	5	Inspiring Action

Module 1 HW Due Wed. 6/19 11pm

Module 2 HW Due Wed. 6/26 11pm

Module 3 HW Due Wed. 7/03 11pm

Module 4 HW Due Wed. 7/10 11pm

"Client" Deliverable Due ??

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