

DATA SCIENCE

SYD DAT 6

Week 1 – Course Overview & Getting Started

1. Meet The Instructors
2. Meet Your Classmates
3. Instructor Philosophy
4. Content Philosophy
5. How To Succeed
6. Typical Class
7. Logistics
8. Course Project
9. Setting Up

ABOUT ME

Pre-Data Science Life

- Early career was rooted in mechatronic engineering and business.
- Moved into strategic marketing, where my job was to imagine new industrial technology solutions
- Travelled
- “Discovered” machine learning and decided to go all in.



ABOUT ME

New Data Science Life

- Early data jobs contracting in reporting.
- Read about machine learning, networked, did online courses, attended meetups, competed in Kaggle
- Consulted in data science under my own businesses
- Developed a machine learning based customer insight tool
- Joined Servian as a consultant specialising in machine learning. My main clients being Commonwealth Bank, Optus and Westpac





- Studied Actuarial Maths & Psychology
- Has worked in insurance and banking for the past 9 years. Currently at CBA.
- Financial & risk modelling roles, managed analytics teams, SAS programmer.
- Took the data science part time course in March 2016 - absolutely loved it!

ABOUT YOU

- › Who are you?
- › Why are you interested in Data Science?
- › Have you done anything with Python (or R)?
- › What is your exposure to Data Science so far?
- › Do you have any applications in mind?



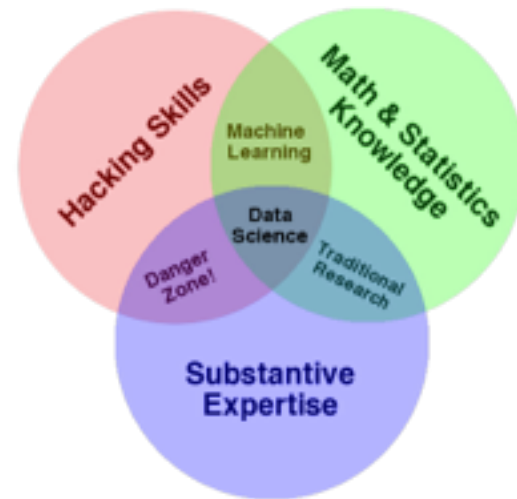
- Embrace Diversity
- Seek an Optimal Pace
- Communicate Early and Often
- Success is not a grade, it's an application

- Application-based Approach
- Understand Key Principles
- Balance Depth and Breadth
- Course Project

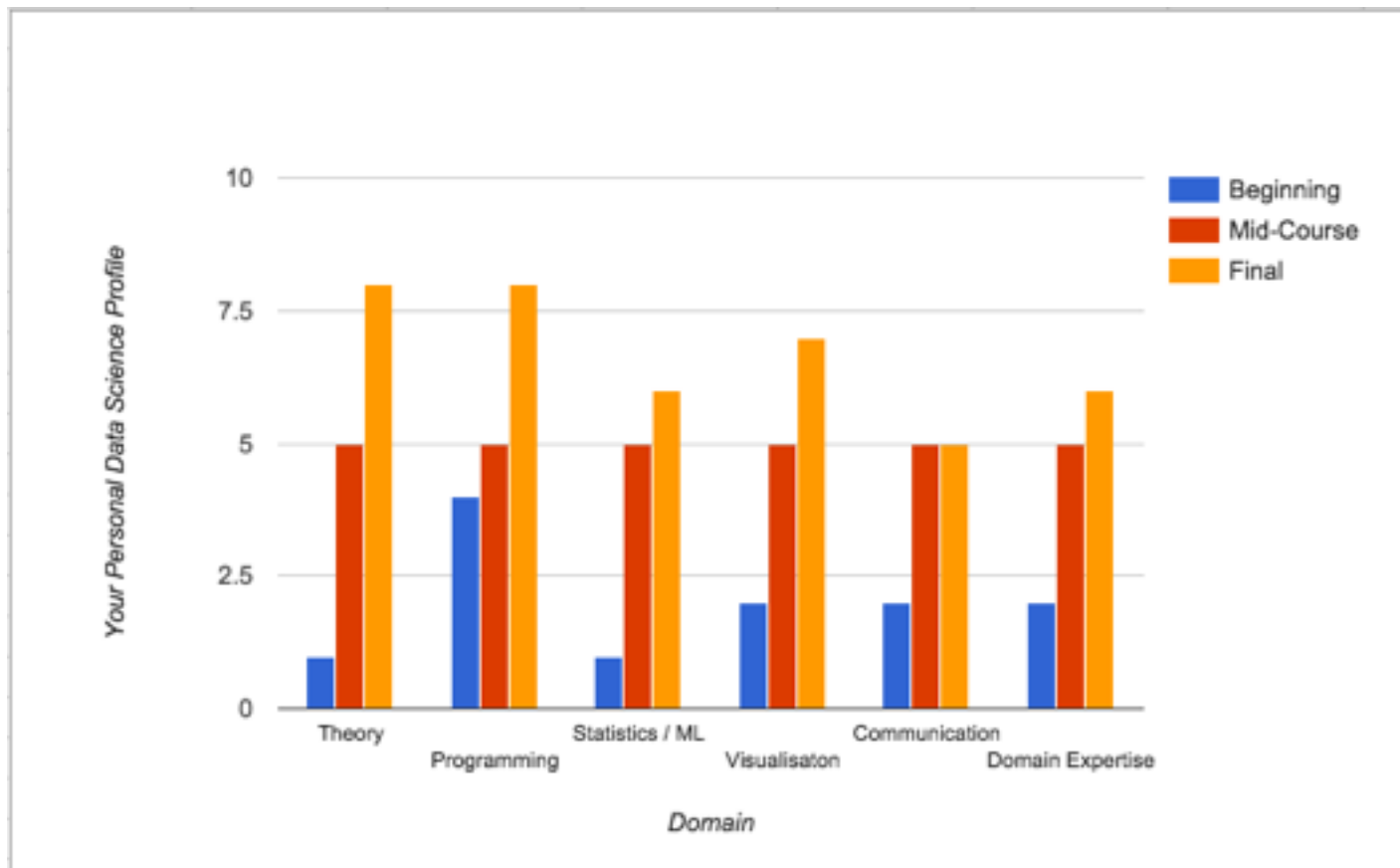


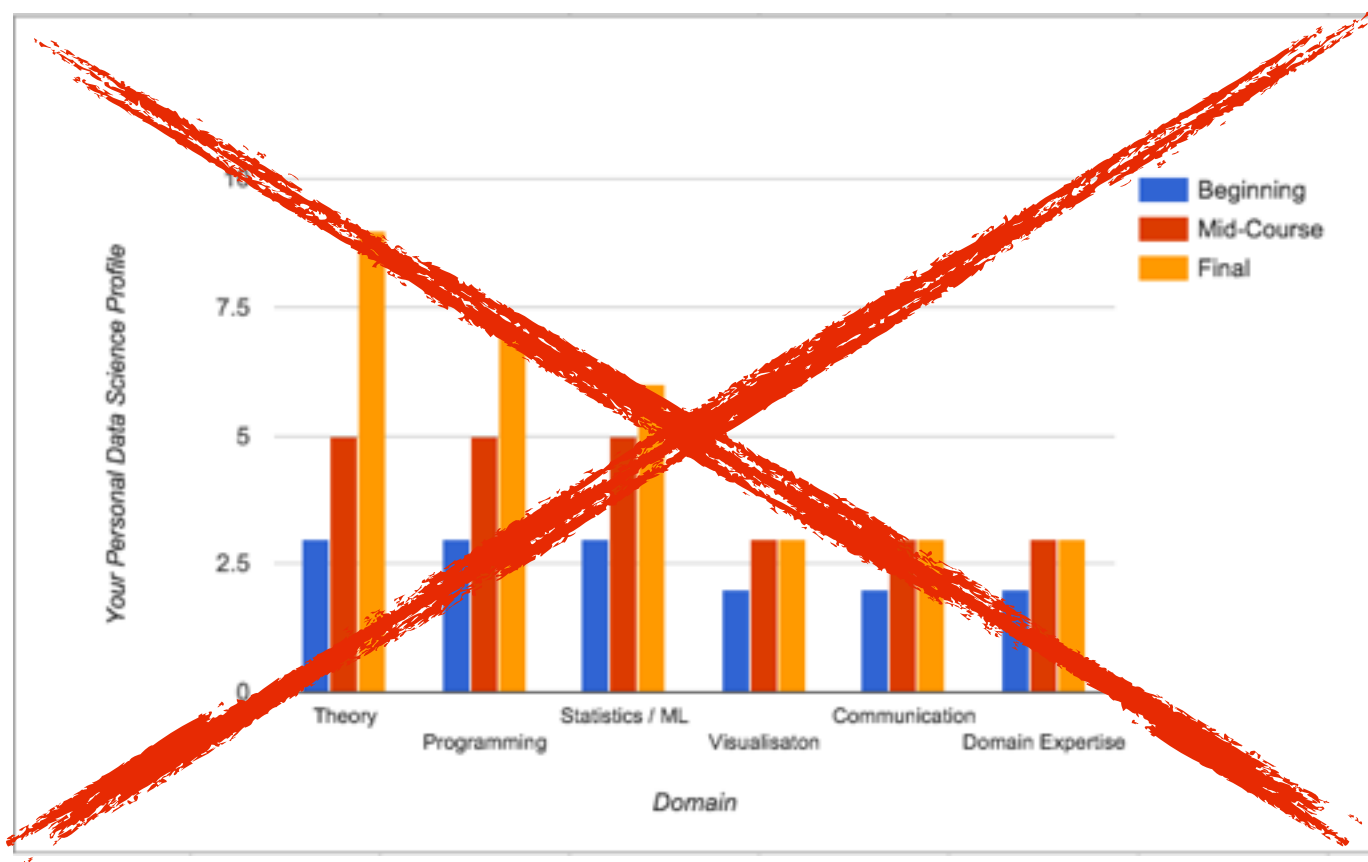
- Multidisciplinary Investigations
- Models and Methods for Data
- Computing with Data
- Pedagogy
- Tool Evaluation
- Theory

Data Science: An Action Plan for Expanding the Technical
Areas of the Field of Statistics
William S. Cleveland



Drew Conway's
Data Science Venn Diagram





- Effort not prior knowledge
- Ask Questions
- Communicate what you've learned
- Help your Classmates
- Be patient with yourself

- Guest Speaker (sometimes)
- Overview of lesson objectives
- Motivating Problem
- Theory
- Lab
 - Code Walk Through
 - Code Exercises
- Class Discussion
 - Homework
 - Readings

- Food
- Dress Code
- Start and end on time
- Missing Class
- Slack Instead of Email
- Office Hours
- Github for course content and homework



The final project should represent significant original work applying data science techniques to an interesting problem.

- › Final projects are individual, but you should discuss your ideas.
- › Pick a subject that you're passionate about.
- › Look at past projects on the github account for some ideas.



DISCUSSION TIME

Pework

- **Software Installations**
 - **Anaconda Python 2.7**
 - **Git Client (and github account)**
 - **Slack (and account setup - WITH PHOTO!)**

DISCUSSION TIME

Pework

▸ Readings

- Metacademy Learning Plan**
- Data Science Handbook**
- An Introduction to Statistical Learning**

DISCUSSION TIME

Pework

‣ Optional Readings

- Codecademy Python course**
- Python for Data Analysis**
- Learn Python the Hard Way**
- Command Line Crash Course**
- Khan Academy - Probability**

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Data Science 6 ...

alasdair

CHANNELS (4)

books-resources

course-project

general

random

DIRECT MESSAGES (19)

slackbot

alasdair (you)

hpeppitt

mallikdel

mikaela

muhsin

quandai

roberto

sallymack

sriramrajagopalan

suseqdo

+ Invite people

+

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#random

18 members | Non-work banter and water cooler conve...

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August 1st




mikaela

12:41 PM

joined #random. Also, @alasdair joined, @quandai joined, @hpeppitt joined, @sallymack joined, @muhsin joined, @mallikdel joined, @sriramrajagopalan joined, @suseqdo joined along with some others.


Yesterday



alasdair

5:09 PM

http://idlewords.com/talks/deep_fried_data.htm
This post is pretty amusing
This talk by Edward Tufte (visualisation and data analysis guru) is a good one.
<https://channel9.msdn.com/Events/Machine-Learning-and-Data-Sciences-Conference/Data-Science-Summit-2016/MSDSS11>

 Channel 9

Keynote Session: Dr. Edward Tufte - The Future of Data Analysis (Channel 9)

MSDSS11 Data analysis seeks to learn from experience. Better inferences require better thinking and better tools. Practical advice about how to make more credible conclusions based on data. What we can exp

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Message #random

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