GENERAL ASSEMBLY

DATA SCIENCE
11 WEEK PART TIME COURSE

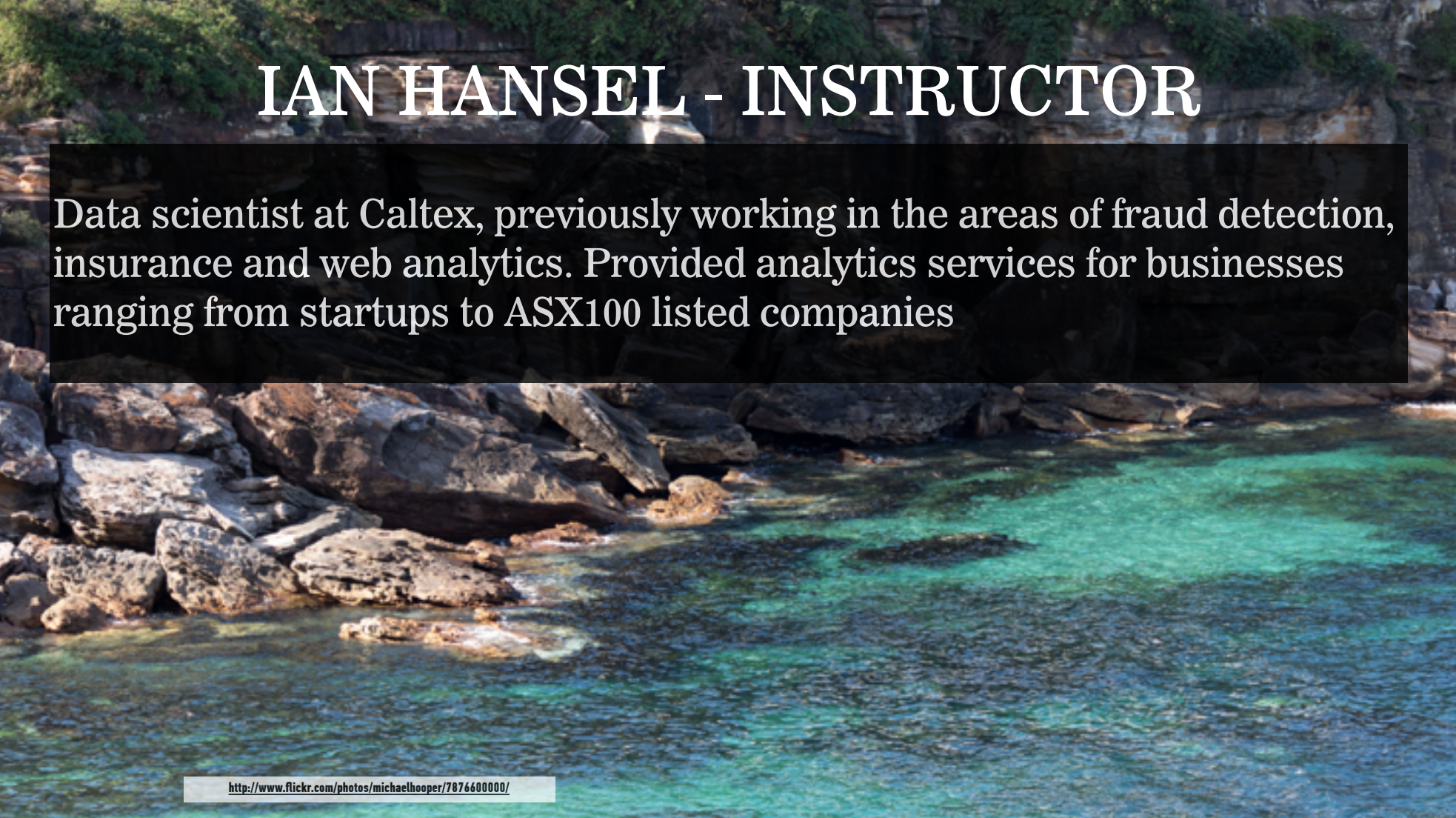
Week 1 – Course Overview & Getting Started

AGENDA

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

IAN HANSEL - INSTRUCTOR

Data scientist at Caltex, previously working in the areas of fraud detection, insurance and web analytics. Provided analytics services for businesses ranging from startups to ASX100 listed companies



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ALASDAIR DOUGLAS - TA

Data scientist at Servian, providing analytics services for blue chip companies such as Commonwealth Bank of Australia. Forward thinking, entrepreneurial and engaged with the data science community in Sydney.

http://www.flickr.com/photos/michaelhooper/7876600000/

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?

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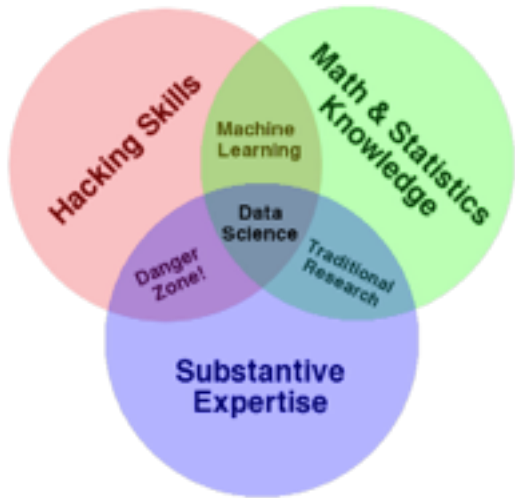
- Embrace Diversity
- Seek an Optimal Pace
- Communicate Early and Often
- Success is not a grade, it’s an application

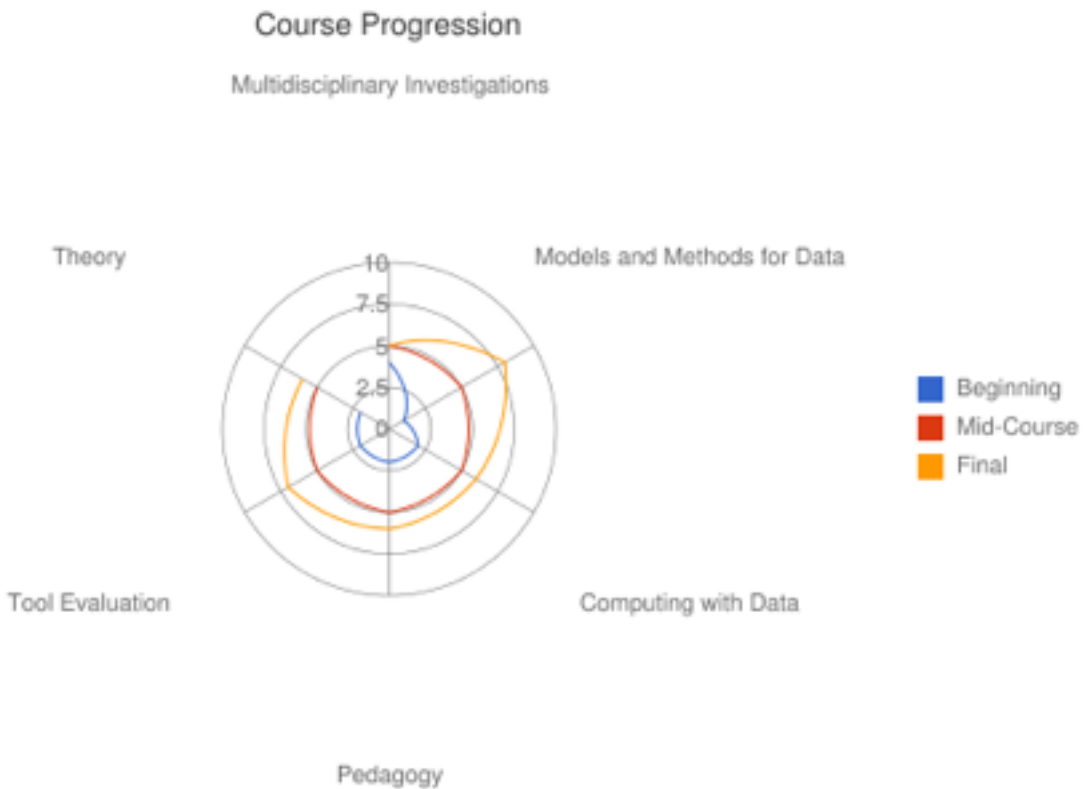
- Application-based Approach
- Understand Key Principles
- Balance Depth and Breadth
- Course Project

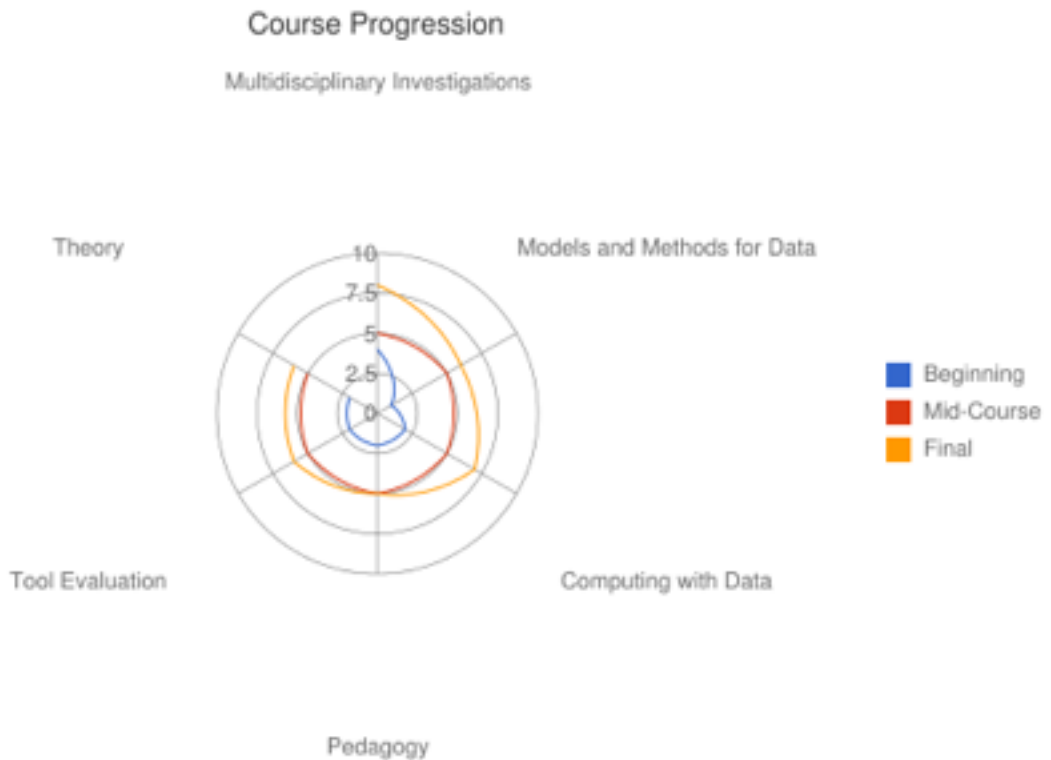
- Multidisciplinary Investigations
- Models and Methods for Data
- Computing with Data
- Pedagogy
- Tool Evaluation
- Theory

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


Course Progression
Multidisciplinary Investigations
Theory
Models and Methods for Data
10
7.5
5
2.5
0
Tool Evaluation
Computing with Data
Pedagogy
Beginning
Mid-Course
Final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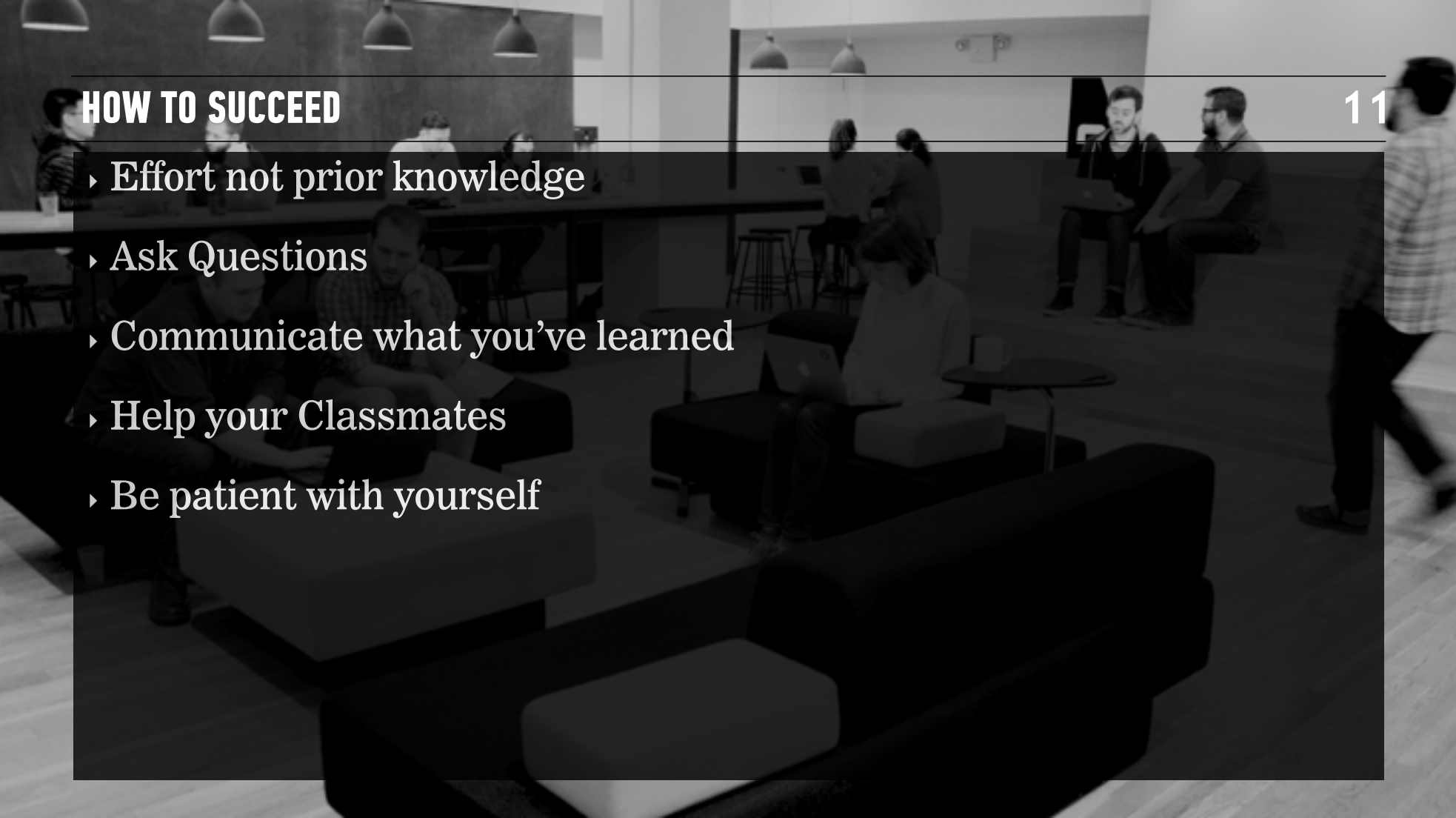


HOW TO SUCCEED

- 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

- Bathrooms
- 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 attainments, but you should be talking frequently with your instructors and classmates about them.

Address a data-related problem in your professional field or a field you're interested in. Pick a subject that you're passionate about; if you're strongly interested in the subject matter it'll be more fun for you and you'll produce a better project!

Look at past projects on the github account for some ideas.

DISCUSSION TIME

Prework

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

DISCUSSION TIME

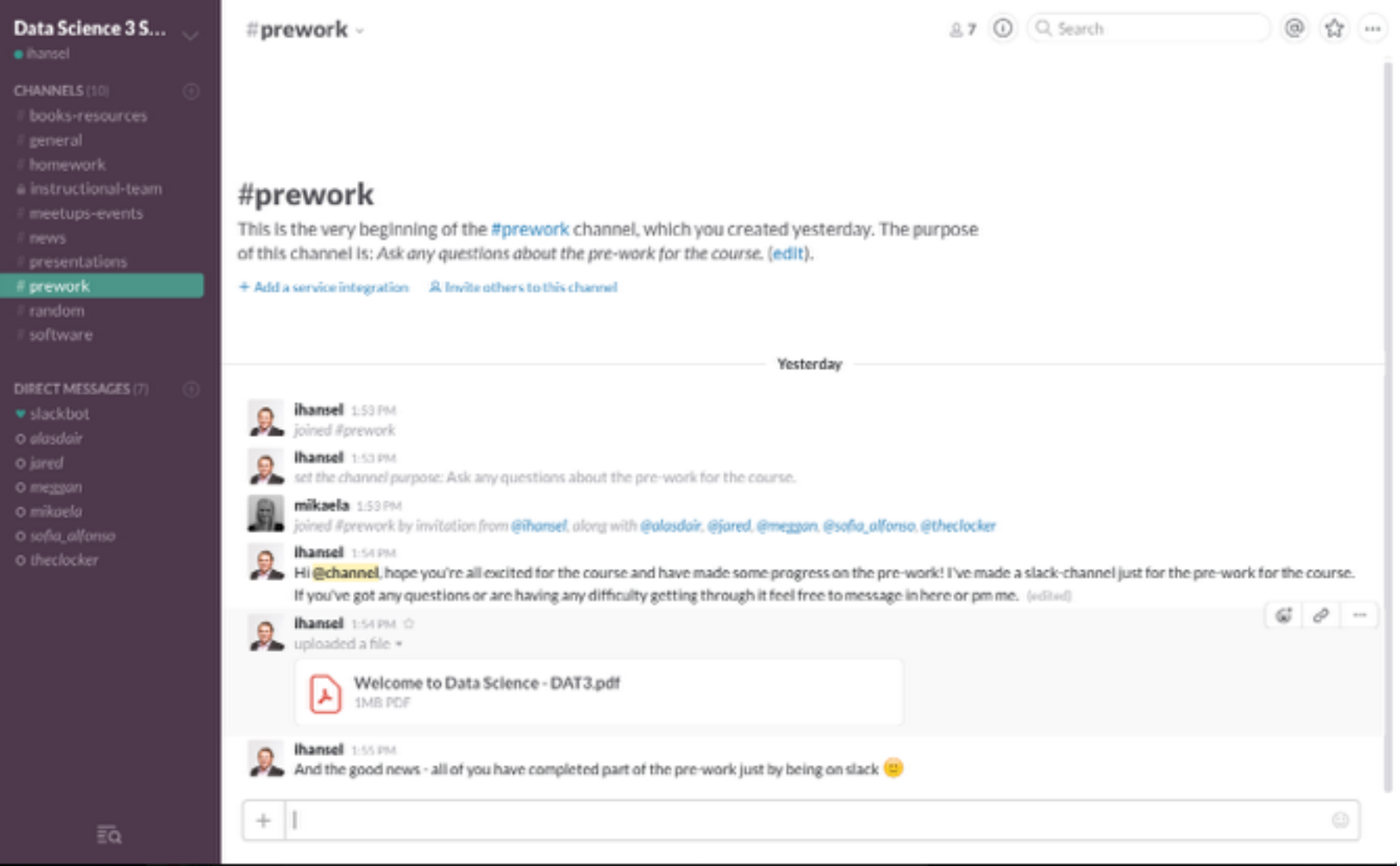
Prework

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

DISCUSSION TIME

Prework

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


Data Science 3 S...
ihansel
CHANNELS (10)
books-resources
general
homework
instructional-team
meetups-events
news
presentations
prework
random
software
DIRECT MESSAGES (7)
slackbot
alasdair
jared
meggan
mikaela
sofia_alfonso
theclocker
#prework
7
Search
#prework
This is the very beginning of the #prework channel, which you created yesterday. The purpose of this channel is: Ask any questions about the pre-work for the course. (edit).
+ Add a service integration
Invite others to this channel
Yesterday
ihansel 1:53 PM
joined #prework
ihansel 1:53 PM
set the channel purpose: Ask any questions about the pre-work for the course.
mikaela 1:53 PM
joined #prework by invitation from @ihansel, along with @alasdair, @jared, @meggan, @sofia_alfonso, @theclocker
ihansel 1:54 PM
Hi @channel, hope you're all excited for the course and have made some progress on the pre-work! I've made a slack-channel just for the pre-work for the course. If you've got any questions or are having any difficulty getting through it feel free to message in here or pm me. (edited)
ihansel 1:54 PM
uploaded a file
Welcome to Data Science - DAT3.pdf
1MB PDF
ihansel 1:55 PM
And the good news - all of you have completed part of the pre-work just by being on slack

Contact

Name: Ian Hansel

Email: ian.hansel@gmail.com

Twitter: @ihansel

Please get in contact if you have any questions about the material covered