

Once Upon a Time, I Became a Data Scientist

Kaelen L. Medeiros

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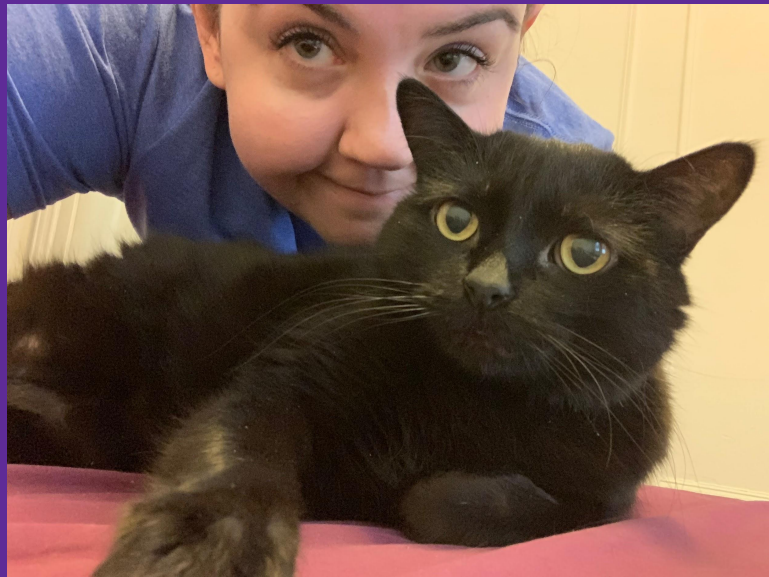


Outline

- Intro
- Education
- Post-grad
- Transition into Data Science
- Tips! (interspersed)

Hi, I'm Kaelen

- Data Scientist on the Product Team @ DataCamp, with focus on Mobile & Campus apps
- Former co-organizer of RLadies Chicago
- they/them pronouns
- Proud cat mom to Scully



**BUT! I wasn't always a
data scientist...**

Birth to 18 years old



- I was once born
- I did some stuff
 - Full resume available upon request
- I got into college

Undergrad

- Graduated from the University of Michigan in 2011 with a degree in...
 - Screen Arts & Cultures
 - Women's Studies
 - With a focus on gender & sexuality studies
- Work-study jobs:
 - Barista
 - Teacher's Assistant at the North Campus Childhood Center



Film????



- Honor's thesis about the 2009 Diablo Cody classic, "Jennifer's Body"
- Most of my work was queer/feminist horror theory
- But! A PhD in film meant living in the ivory tower of academia forever



So I took a year off...

Post-bacc

- Decided to enroll for a post-bacc at Eastern Michigan University
- Started off in math, science, and computer science classes



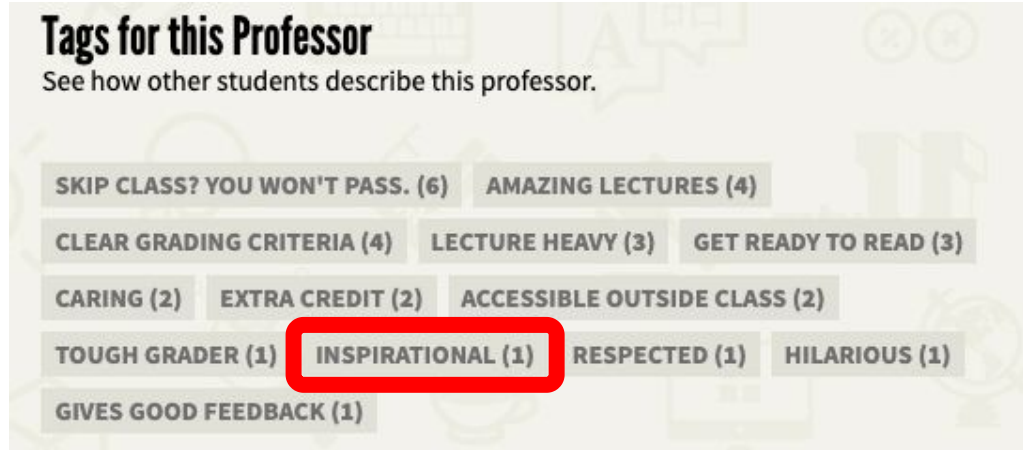
While I was post-bacc-ing

- Learned that I LOVED math
 - But I'm not naturally gifted at it
 - So I had to learn to ask for help!
- Had to swallow my pride
 - I had a degree from a Public Ivy
 - Please come chide me after the presentation for putting this on this slide
- And then, one fateful day, in genetics class...

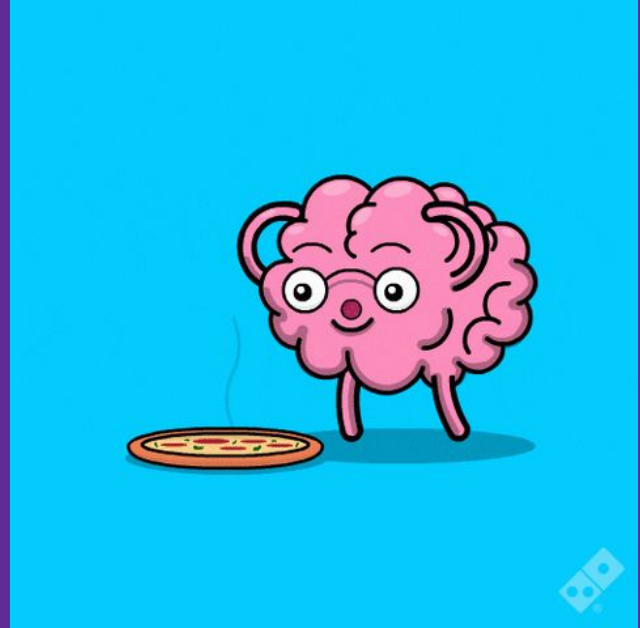


If you like math, and biology, and computer science...

- Check out biostatistics or bioinformatics!!!



This blew my
mind.



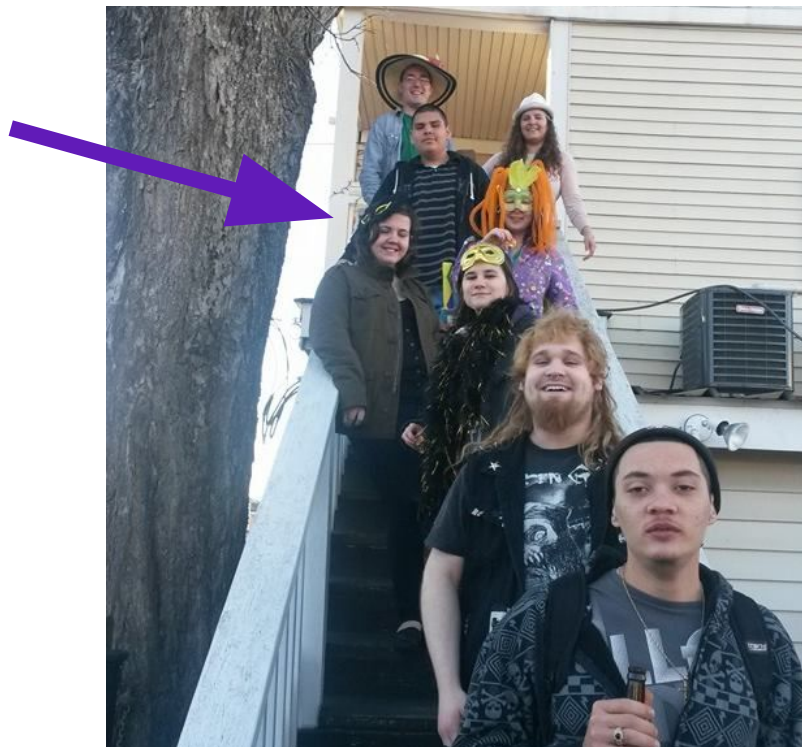
Research!

- Cancer research with the Casper Lab of EMU
 - [Dr. Anne Casper](#)
- I struggled with research
 - Counting yeast colonies by hand didn't move me
 - I sucked at making agar plates
 - Dr. Casper thought I should do math research, but let me into the lab anyway



What happens in New Orleans,

- Visited a college roommate for Mardi Gras
- Fell in love with New Orleans
- I didn't drink at the time so I'm not drunk in this picture, just caught off-guard



Graduate School



- Louisiana State University Health Sciences Center
- Enrolled in M.P.H. in Biostatistics, switched to M.S. at request of professors
- Almost dropped out 3 times
- Worked at the Louisiana Tumor Registry
 - Part of a research group that published 5-6 papers in my time there

Thesis + Graduation + Jobs?????

- Defended thesis March 2016
- Interviewed for jobs April 2016
- Graduated May 2016
 - With a job!!!

Lastly, I would never get anything done without the support, love, and guidance of Nana and Bumpa, my unwavering grandparents who raised me right, helped me move to New Orleans, and never stopped cheering me on as I took the long way around to get this degree. I owe much to

, all of whom dealt with me explaining this project to them while kindly pretending they knew what I was talking about. I finished this for Ella, Michael, and Rory, particularly so I can show my nephew a world bigger than the one I was given. I love you all so much.

M.S. thesis dedication page

American College of Surgeons

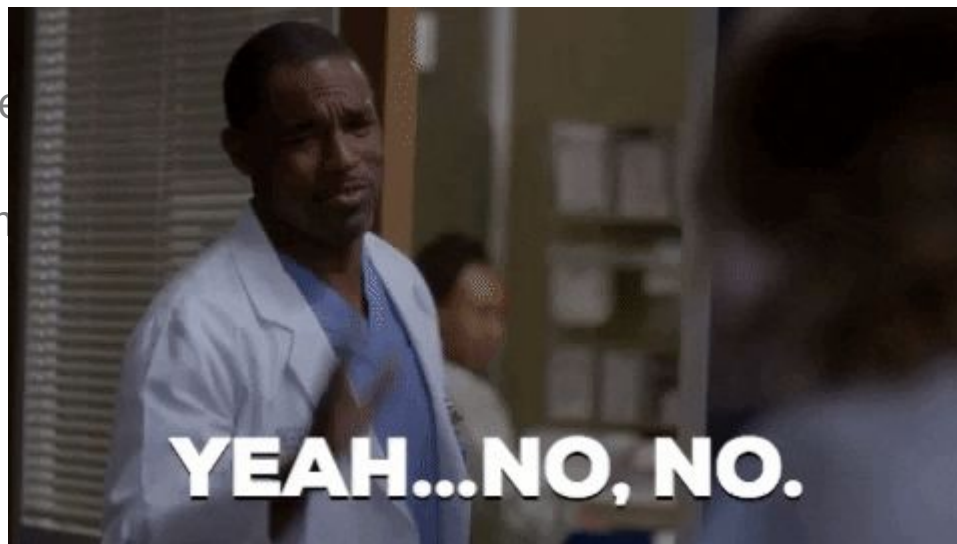


AMERICAN COLLEGE OF SURGEONS

*Inspiring Quality:
Highest Standards, Better Outcomes*

100+years

- Statistician for the NSQIP at ACS
 - National Surgical Quality Improvement Programs
 - Worked on Bariatric surgery & designed transplant surgical quality program
- SAS shop
 - :(:(:(:(:
- With a 10 year old codebase
 - :(:(:(:(:
- That they had no interest in
 - :(:(:(:(:



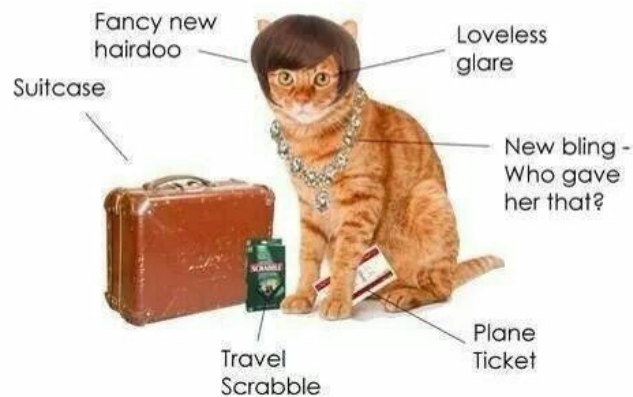
SAS... Never Again.

Something is still missing!

- I took Python classes through [RMOTR](#), an online hybrid Python class, through a grant I got from Women Who Code
 - Took beginning & advanced
 - Web-dev focused
 - Thought I **HAD** to know Python to be a data scientist
- Did [Datanauts](#) in early 2017
- Got active on twitter #rstats
- Casually applied for data scientist jobs

Is your cat about to leave you?

What to look out for:





HERE Technologies

- FINALLY got a data scientist job
 - In an R shop!
- DS on the Quality team for the whole company
- Learned to work with engineers
- Wrote an internal R package
- Lots of “Yes, I work HERE” jokes

R-Ladies Chicago

- Started co-organizing with the amazing [Angela Li](#) and [Amanda Dobbyn](#)
- Helped install a board of organizers before leaving Chicago
- Mentored fellow board member, Caroline Williams



Mentor Before You're Ready!!!

- Caroline reached out to me for mentorship and I was terrified
- I'd been a data scientist for 5 minutes
- But I learned so much!
 - How to teach small things, like:
 - How do I know when to update R? R packages?
 - How do I find resources to learn more R?
 - Lots of general tips on how to get going in data science, with and without higher education
- Helped her start the [Astrostatistics Study Group](#)

DataCamp

- Recruited to write a course
 - Experimental Design in R
 - Worked with Richie Cotton to outline it
- DataCamp opened up a “Content Quality Analyst” job
 - I’d been a quality statistician/data scientist for years and had enjoyed working with Richie
- I got the job!
 - Started in May of 2018
 - Moved to NYC
- That job title tho....



Risky Business

- I took a risk stepping away from my data scientist job to be a CQA
- I had ZERO idea if this would pay off
- Things I did as a CQA to help me stay on track:
 - Maintained and expanded the Content Quality dashboard
 - Kept up with weekly meetings with either Dave Robinson or Ramnath Vaidyanathan
 - Kept taking DataCamp courses



Advice to new data scientists

So, in the spirit of continuing to offer advice to beginners, here is the email I would send to anyone else who asked me how to get into data science in 2019.

It's a two-step plan:

1. Don't shoot for a data science job
2. Be prepared for most of your data scientist work to not be data science. Adjust your skillset for that.

These are really discouraging! But, let me elaborate on both of them, and hopefully they'll seem less bleak.

From Vicki Boykis' blog, ["Data Science is Different Now"](#)

Product Data Scientist

- DataCamp opened up a few different DS roles in January 2019
- David Robinson suggested I apply for one
 - And I actually listened!!
- Relied on my in-company sponsor, Mari Nazary for help on interviews & negotiation
 - Get a sponsor!!
 - Mari is now Head of Content and so helpful to have in my corner (and a good friend!)
- See this [blog](#) by Lara Hogan on the differences between sponsorship and mentorship



Image from blog by [Catt Small](#)

**The absolute, most,
worst, hardest thing
that I learned through
all of this...**



ASK FOR HELP

- It bears repeating: **ASK FOR HELP**
- I am almost 30
- I am terrible at this
- I still try to do it every day
- I did it yesterday in both of my 1-1 technical mentorship meetings and was immediately relieved



Some places you can ask for help

- #rstats on Twitter
- The [R-Ladies Community Slack](#) has a help channel
- The R-Ladies NYC has a help channel
- Meetups (look around!)
- Coworkers
- Mentors
- Sponsors



**Thank you for
having me!**

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