Developing *effective* data scientists

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Data Science Kick-off
University of Michigan
October 6, 2015

I'm Erin and I'm a data scientist.

...and an alum!

MS in Biostatistics '08
PhD in Bioinformatics '12

effective

data scientists

communicate well.

Student's to-do:

1. Present your work
2. Blog
3. Teach others

Teacher's to-do:

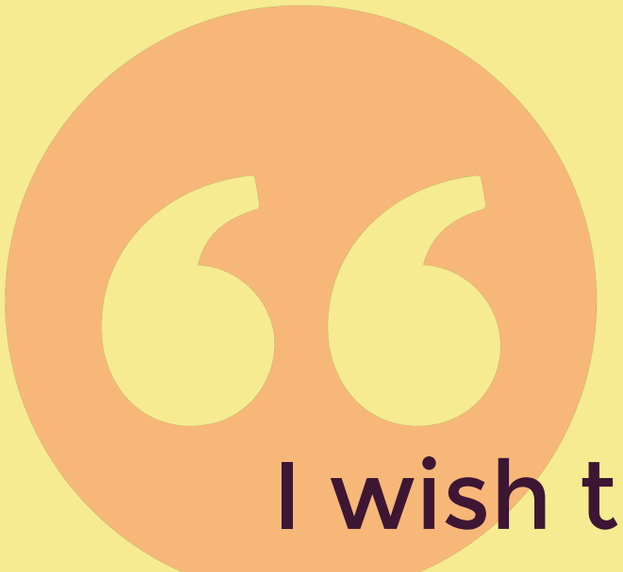
Center coursework on presentation and communication

effective

data scientists write high-quality code.

The single most useful thing I learned in grad school was how to work with data in Python.

–Sarah Guido, Data Scientist @ Bitly and UM alum



I wish there had been more emphasis on real data/messy data/getting my own data/cleaning data.

–Trey Causey, Data Scientist @ ChefSteps, @4thdownbot

Student's to-do:

1. Develop deep expertise in a programming language
2. Adopt good coding practices now

Teacher's to-do:

1. Expose students to a variety of datasets
2. Focus on applications

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data scientists are curious, life-long learners.

LEARN MORE CODING AND STATISTICS. Meet other people working on data sets not in your field. Learn something not in your field. Don't sit in a box staring at your thesis project.

–Wendy Grus, Technical Data Analyst @ Inrix and UM alum

I took Naval Criminal Law & international relations. It was hard to stay awake. By comparison, I looked forward to vector calculus and loved Matlab. Lesson: Don't be afraid to explore your options while you are still on the track of figuring out what comes next.

–Amanda Casari, Senior Data Scientist @ Concur

Boundaries between disciplines are becoming less-defined. There are general, powerful patterns of thinking that apply to many disciplines. A good way to become aware of these patterns is to broaden exposure to disciplines.

–James Pestrak, Senior Data Scientist @ Nordstrom

Student's to-do:

1. Pursue academic interests outside your discipline
2. Go to meet-ups!

Teacher's to-do:

1. Teach with diverse datasets
2. Illustrate parallels between disciplines

Big ups to these *effective* data scientists

Amanda Casari
Trey Causey
Wendy Grus
Sarah Guido
James Pestrak