**I want the entire workshop to be in a jupyter notebook – we’ll interact in Colab. Slides and all.**

I put the slides as text in the notebook.

They can interact with the code – often fill it in in places.

Just host the images somewhere.

**Why Python**

* Statistical languages, *especially* Python, are experiencing huge growth around the world. Languages like Java which have had a traditional hold in the professional community are getting increasingly displaced – although admittedly Java is still quite popular. <http://pypl.github.io/PYPL.html?country=>
* The reason for this growth, I think, is a few things:
  + Approachability: Python is a high-level, interpreted language. That means you can sit down and write code that gets stuff done pretty quickly. (Examples: Python vs. Java)
  + Strong user community: There are strong amounts of packages available. In a broad set of domains, but particularly (of relevance to us) in the data science, scientific analysis, numerical computing, machine learning, graphing domain (show examples).
  + Speed. The traditional drawback of interpreted languages is that they’re slow. Python is closing this gap through powerful numerical computing libraries that compile down to C. The easiest proof I can give you is that state-of-the-art machine learning (with > 1 billion parameters) happens in Python, and trust me, speed matters so them.
* There are other languages out there, and here’s a few reasons Python may NOT be right for you:
  + You want a specialized statistical / graphing language. The community in R is still the strongest, although Python is giving it a run for its money.
  + You want to do industry-scale engineering in large teams. Stay in C++ Java. [Show the TIOBE index which is industry heavy but highlight RAPID growth of Python] <https://www.tiobe.com/tiobe-index/>
  + Otherwise, Python can do what you want.
* Questions? I want to make sure you are bought in, and see if Python is right for you. We’re obviously asking you to learn a new language.

**I’d like to model the rest on the introduction to R.** Get slides from Joanna and cover similar topics, with a focus towards social media.