INTRODUCTION
Communicating results, analysis, and findings is a major task for researchers and educators. Often, data visualization can help scientists and researchers analyze complex phenomena and illustrate findings and analysis in a visually impactful and meaningful way. And presenting data visualizations such as in a poster session, lecture, or presentation have become increasingly popular.

We created a series of video lectures to introduce graduate students and postdoctoral scholars to a popular and powerful interactive data visualization tool called D3js and learn how to create and present them using graphic principles.

USERS
Our goal was to reach out to graduate students and postdocs at UC Davis. We sent an email out and within one week received 158 responses. We asked each individual to let us know their knowledge on several computer software (see figure 1). Majority of the respondents were from Agricultural and Environmental Science, Biological science, and Engineering (over 80%).

VIDEO LECTURES & WORKSHOPS
We made video lectures so people can watch and follow along at their own pace. We created a website where people can learn and stay up to date with new videos; we also created a vimeo site where we have uploaded our videos; and have also created a google group so that we can communicate with the users and answer their questions. No prior knowledge or background of programming or graphic communication is required, but is recommended.

D3js (Carlos)
This series starts with how the internet works and how D3js is used. Referencing primarily Scott Murray’s book Interactive Data Visualization for the Web, Carlos has selected key elements of each chapter to present.

Graphic communication (Sahoko)
This series of videos explains graphic principles and how to apply them to lecture and poster presentations, and how to use graphic software to make data visualizations visually impactful and meaningful.

LEARNING OBJECTIVES
- Create visualizations using D3js
- Explain how to set up a website
- Improve lecture presentations
- Enhance visualizations using graphic software

WHAT NOW?
We will continue to add video lectures about data visualization. Some additional videos that we are currently working on include: mapping, using open source GIS, D3js steam maps, animated visualizations, and many more!

Feedback
We have received some feedback on the videos and will keep these comments in mind when making new videos. There is opportunity for people to comment in the video (on vimeo) and on our google groups site.

Questions and comments
Are you interested in designing with data?
Visit our website at:
ucdviz.weebly.com

Questions, comments or feedback? Email us!
ucdvizualization at gmail dot com

Figure 1: A total of 158 respondents answered our call to sign up for our video workshop.

Acknowledgments
Special thanks to Michele Tobias, Kalai Ramea, Jamieila Brooks, Kate Munden Dixon, and Cory Parker whose feedback greatly improved our videos. Additional thanks goes out to We also want to thank the 2016-17 group of PFTF fellows as well as Teresa Dillinger and JP Delplanque for their support and feedback on the project.

Carlos Rojasa
Sahoko Yubi

aPhD candidate, Computer Science, crojas@ucdavis.edu
bPhD Candidate, Geography Grad Group, Dept of Human Ecology, syui@ucdavis.edu

DATA VISUALIZATION & DESIGN WITH D3JS