

## Community Spotlight

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# Working with spreadsheet-style data in Python with pandas and seaborn (Version 1.0)

By Madeleine Bonsma-Fisher



#### **Module Description:**

This 4-hour participatory live-coding workshop takes learners through the basics of programming in Python via the Jupyter Lab interface and culminates with exploration and visualization of real-world bicycle count data from the City of Toronto. The file 'lecture-notes-python-workshop.ipynb' can be opened and run with Jupyter notebook or Jupyter Lab, and the material is designed to be presented as a participatory live-coding workshop in which learners follow along as the instructor projects their code. The file 'lecture-notes-python-workshop.html' is a rendered version of the .ipynb notebook file that can be viewed in a browser.

This material focuses on using the package pandas for working with spreadsheet-type data and the packages matplotlib and seaborn for data visualization.

This material is based on workshops (<a href="https://uoftcoders.github.io/2018-07-12-utoronto/">https://uoftcoders.github.io/2018-07-12-utoronto/</a>) hosted by UofT Coders (<a href="https://uoftcoders.github.io">https://uoftcoders.github.io</a>), inspired by the Data Carpentry Ecology Python lesson (<a href="https://datacarpentry.org/python-ecology-lesson/">https://datacarpentry.org/python-ecology-lesson/</a>).

### **Teaching Setting:**

This versatile workshop is appropriate for undergraduates, graduate students, faculty, or staff in any discipline. This resource assumes no background knowledge of programming.

#### **QUBES Citation:**

Bonsma-Fisher, M. (2018). Working with spreadsheet-style data in Python with pandas and seaborn. QUBES Educational Resources. doi:10.25334/Q4PF1D

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#### **Related Materials and Opportunities:**

This resource uses Jupyter Notebooks or Jupyter Lab, both of which are software hosted by QUBES. Both programs can be accessed from the <u>Jupyter Notebooks</u> and <u>Jupyter Lab</u> pages on QUBES and launched directly in a browser, eliminating the need to download them. <u>Browse all software on QUBES</u>.

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