

A decorative background featuring a network diagram with nodes and connecting lines. The nodes are represented by circles of varying sizes and colors, including blue, grey, and white. Some nodes are highlighted with a blue outline. The lines are thin and grey, creating a web-like structure that spans the entire image.

SRCE Data Science Workshop

A decorative network diagram in the top-left corner, featuring a complex web of interconnected nodes and lines. Some nodes are highlighted with blue circles, and others with blue dots.

Announcements!

A decorative network diagram in the bottom-right corner, featuring a complex web of interconnected nodes and lines. Some nodes are highlighted with blue circles, and others with blue dots.



Data Science in Economics

Why Data Science?

Data Science and Economics are very closely related, The way Economists pursue theory is through data science, collecting insights about what is actually happening in the world, outside of a theoretical model.

Where does Data Science and Economics Align?

Both practices are heavily grounded in statistics and solve quantitative problems through modeling. Most of which require strong analytical skills.

More Info on Data Science as a program at UIUC

<https://datascience.illinois.edu/>

Hello!

I am Ramsey El Lethy

Senior - Econometrics and
Quant Econ.

You can find me at
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1.

DS at UIUC

Where can we get started?



We want every student at UIUC and beyond to have the opportunity to have **meaningful experiences** with data science, regardless of their background or major. We make that possible with our clear, understandable lessons and guides, real-world examples, and diverse applications across all disciplines.

-Karle Flanagan

How can you get Involved?

- ◎ (In department) Econometrics/CS+Econ Courses
- ◎ (Out of Department) BSIS + DS
- ◎ Illinois Data Science Club
- ◎ STAT/CS/IS 107 “Data Science Discovery”
- ◎ UIUC Datathon
- ◎ Econ Data Lab
 - <https://guides.library.illinois.edu/STATA>

Let's look at our Department

1. Econometrics
 - a. Data Driven Statistical and Economical analysis
 - i. Interested in Tech?
2. CS + Econ
 - a. Foundations in Computer Science and Economics
 - i. Can specialize in many different ways!

What is Python?

Python is a Programming language that functions much like many other programming languages

Its design philosophy is being easy to interpret, and easy to read.

Many CS beginners start on python because of its readability.

Python does not have any general purpose, its used for Data Sceince, Building software and websites, as well as automating different computer tasks.

Let's get to work!

Time to get some code
actually running on our
machines!



Co-Lab and GitHub

Co-Lab

This is how we will actually work and run our code



GitHub

This is how we can share code across multiple devices, as well as store and keep things centralized.



Let's look at some code

Checking out the github,
notice where we store code
for each language, as well
as the data sets



Let's work on something together

Take a look at the data-sets folder, we're going to pull one of them onto our machines and start working!

Extra Resources

- ◎ Learn Python - [JetBrains](#)
- ◎ [UIUC Free Python Courses](#)
- ◎ [Python Documentation](#)





Thanks!

Any questions?

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