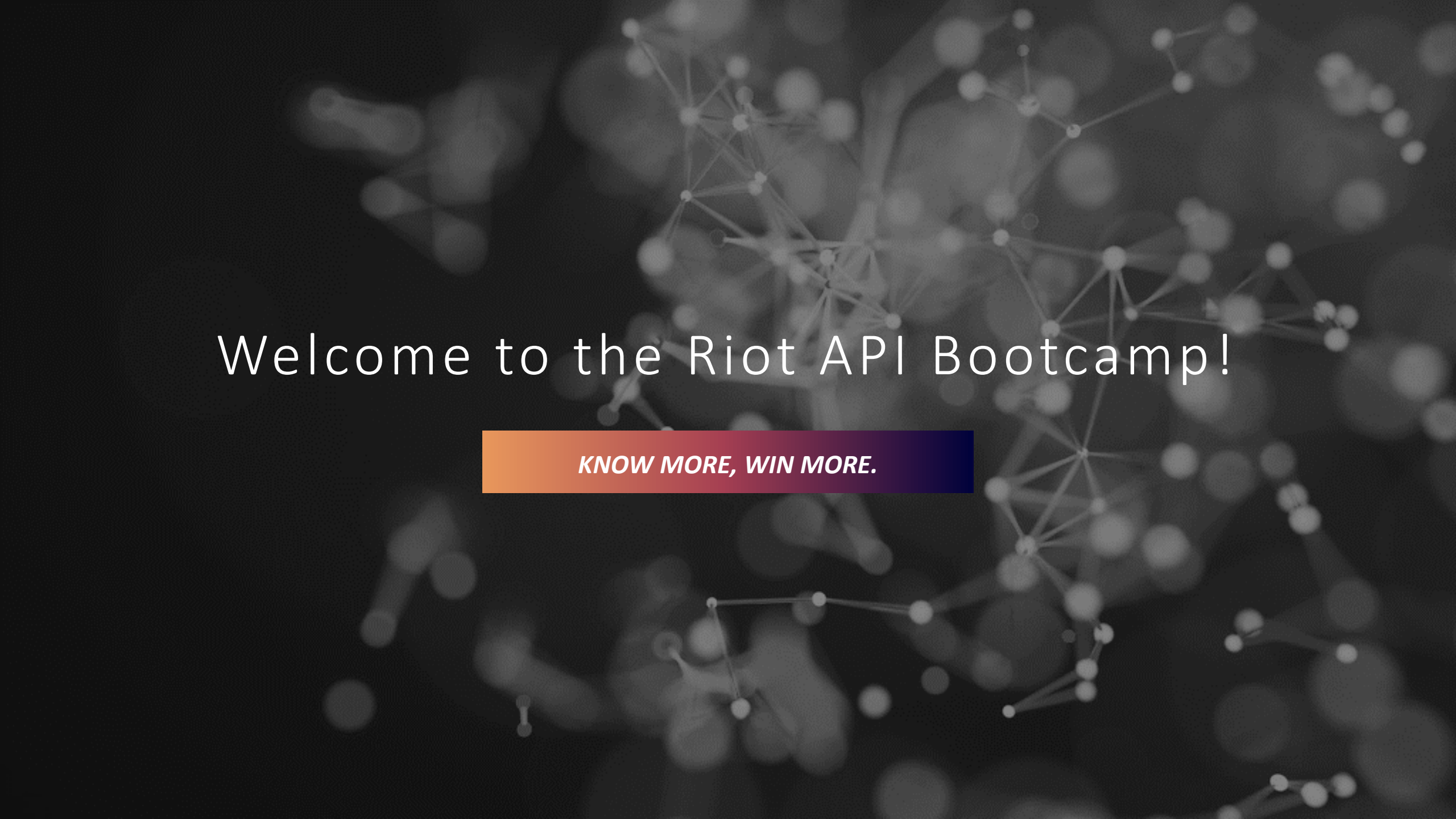
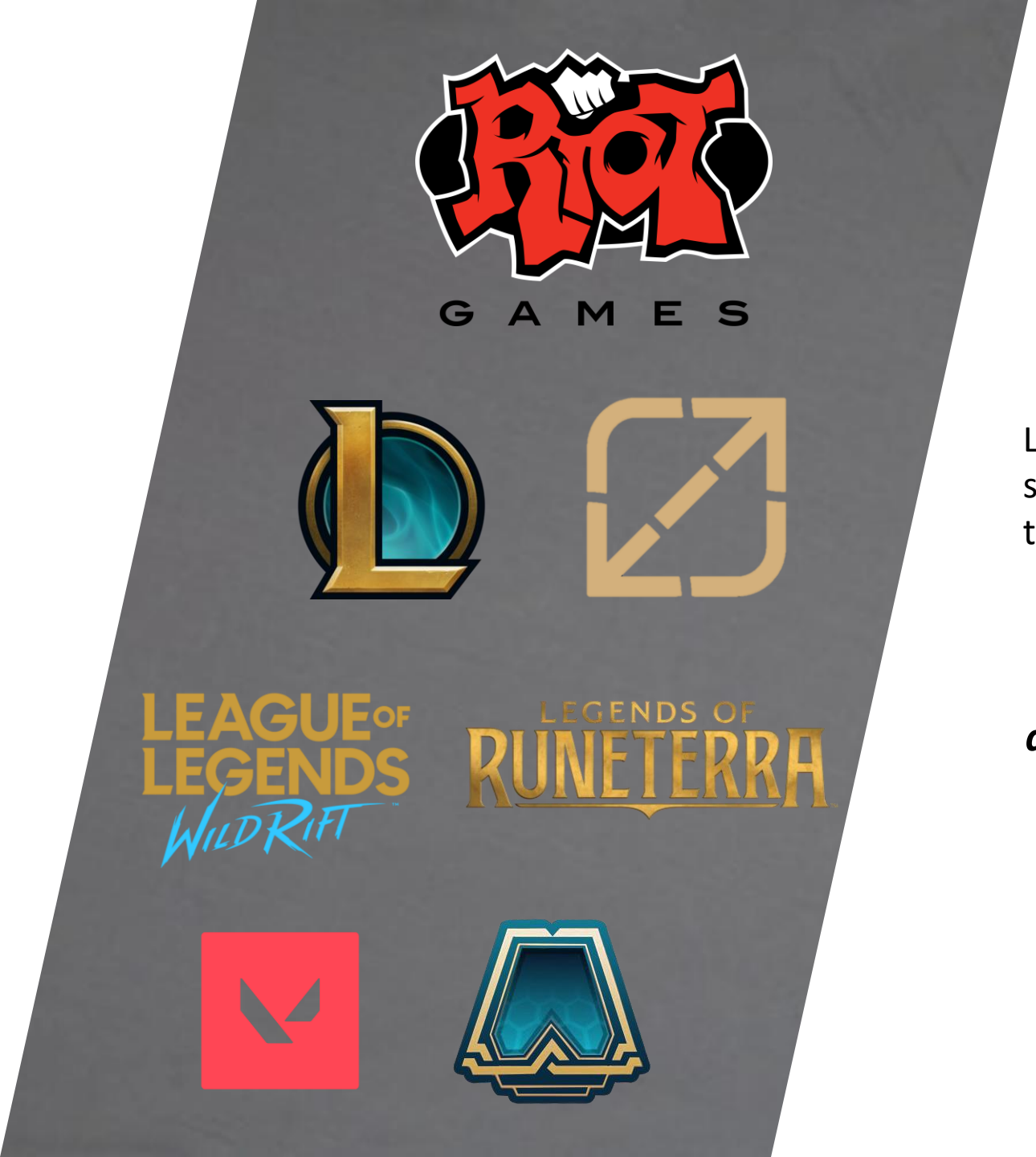

Welcome to the Riot API Bootcamp!
KNOW MORE, WIN MORE.



WHAT IS THE PURPOSE OF THIS COURSE?

Learning to use the Riot API is a bit of a struggle. There's very few resources out there and they're not very structured.

"The Riot API Bootcamp Course is designed to take you from no knowledge up to building your own app."

RebirthNA#2359 @LoL-Genius

417devops@gmail.com

WHO AM I?

Karl, Rocket Scientist & Data Analyst

Past work and collaborations:

- Cloud 9
- NASA
- Wells Fargo
- Mozilla
- Lockheed Martin
- Air Force Research Lab
- Siemens, GSK

Experience in everything from AI/ML to jet engine design

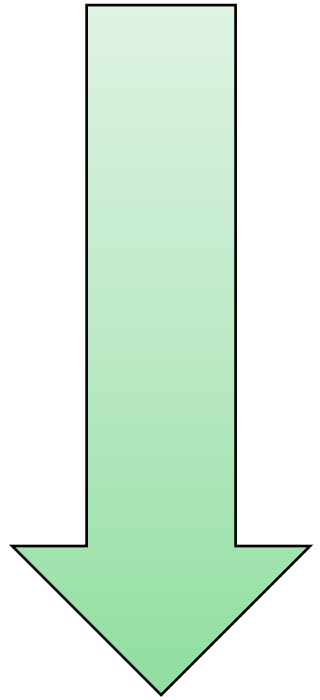
"Solve difficult problems with novel methods, by any means necessary"

RIOT API BOOTCAMP SYLLABUS

1. **Basics (Python, GitHub, Notepad++)**
    1. Resources to get started
    2. Setting up an environment
    3. Downloading GitHub repos
    4. JSON explanation & Notepad++ example
    5. *Project: read csv file, convert to data frame, create graphs*
2. **Riot API introduction**
    1. What is an API?
    2. Getting access & Registering your App
    3. What end points are there/what data is available?
    4. Explanation of puuid/account name
    5. *Project: make an API call on the website & download the data*
3. **Automating API interactions**
    1. Introduction to libraries (Cassiopeia, Riot Watcher)
    2. Getting help (documentation, Discord)
    3. *Project: automate an API call using a library*
4. **Single Endpoint Data**
    1. Use case explanation (e.g., in-depth match analysis, leaderboards)
    2. Code example- getting challenger leaderboard
    3. *Project: request last 25 games for an account and determine the most common champion(s)*
5. **Large Scale Data Collection**
    1. Use case explanation (e.g., match history of top 50 players)
    2. Setting up a process pipeline
    3. Comparing 1 file approach vs. functions across files approach
    4. *Project: determine number of roles (TOP, MID, etc) on the challenger ladder using the last 5 games*

5 Modules covering core topics

Project at the end of each



Module 1: Basics

RIOT API BOOTCAMP

Slide Deck

MODULE 1: BASICS

1. **Basics (Python, GitHub, Notepad++)**
    1. Resources to get started
    2. Setting up an environment
    3. Downloading GitHub repos
    4. JSON explanation & Notepad++ example
    5. *Project: read csv file, convert to data frame, create graphs*

LET'S DIVE IN

RESOURCES TO GET STARTED

Python (Programming Language)

- **Python is a programming language**
  - A way of translating language into computer code
  - Free, distributed by the Python Foundation: https://www.python.org/about/gettingstarted/
- **This is not a Python course**
  - I expect you know basic programming concepts
  - Example: I will explain what a for loop does, but not the syntax behind it
- **There are plenty of Python guides out there!**
  - Better explainers than I can make
  - Python Foundation even has a getting started guide: https://wiki.python.org/moin/BeginnersGuide

These are not the only programs out there- only what I use!

Just about everything is free & open source, so there is a lot of help on the internet (check Stack Overflow!)

Applications

- **Anaconda Navigator**
  - Python IDE + package manager
  - Download at: https://www.anaconda.com/products/individual
  - Guide: https://docs.anaconda.com/anaconda/navigator/index.html
- **GitHub**
  - Version control and collaborative coding
  - Web version at https://github.com/
  - Download the desktop app: https://desktop.github.com/
  - Guide to getting started: https://www.freecodecamp.org/news/the-beginners-guide-to-git-github/
- **Notepad++**
  - Text editor, useful for reading data files
  - Download at: https://notepad-plus-plus.org/
  - Very useful plug-in, "JS Tool" https://www.sunjw.us/jstool/npp/

ANACONDA NAVIGATOR VIDEO

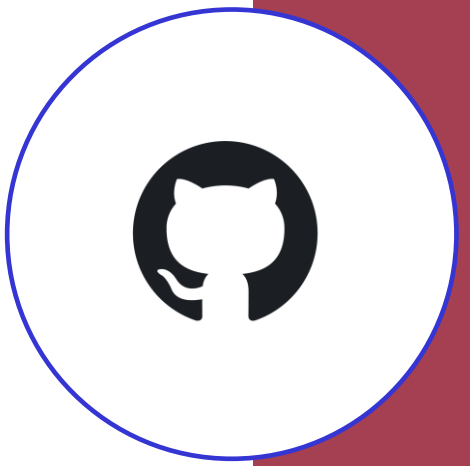
Walkthrough of features

- Spyder
- Making an environment
- Package Manager
- Anaconda prompt

GITHUB DESKTOP VIDEO

Walkthrough of features

- Downloading
- Cloning a Repo
- Pushing a commit



NOTEPAD++ VIDEO

Walkthrough of features

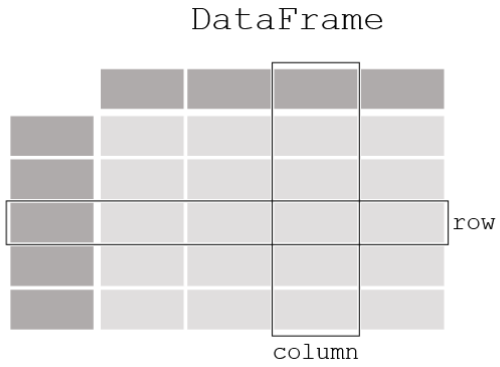
- Programming Language selection
- Adding Plug-ins
- JSON example

FIRST STEPS

Let's build our first Python script!

Goal: familiarity with Python, Spyder IDE, Pandas package

1. **Open the Python IDE**
   - Open Anaconda Navigator
   - Click Spyder
2. **Update the file information**
   - Purpose of the file & last update
   - Save the file!
3. **Import Pandas**
   - `import pandas`
   - https://pandas.pydata.org/docs/getting_started/index.html
4. **Create a data set**
   - Open Excel and create your own (be sure to save!)
   - Find an already existing file
5. **Load the data in Python**
   - Don't know how? Always check Stack Overflow or documentation
   - https://pandas.pydata.org/pandas-docs/stable/reference/api/pandas.read_excel.html
6. **Play around with the data**
   - Try deleting a column
   - What about adding a column?



More info:
https://pandas.pydata.org/docs/getting_started/intro_tutorials/index.html

FIRST STEPS CONTINUED

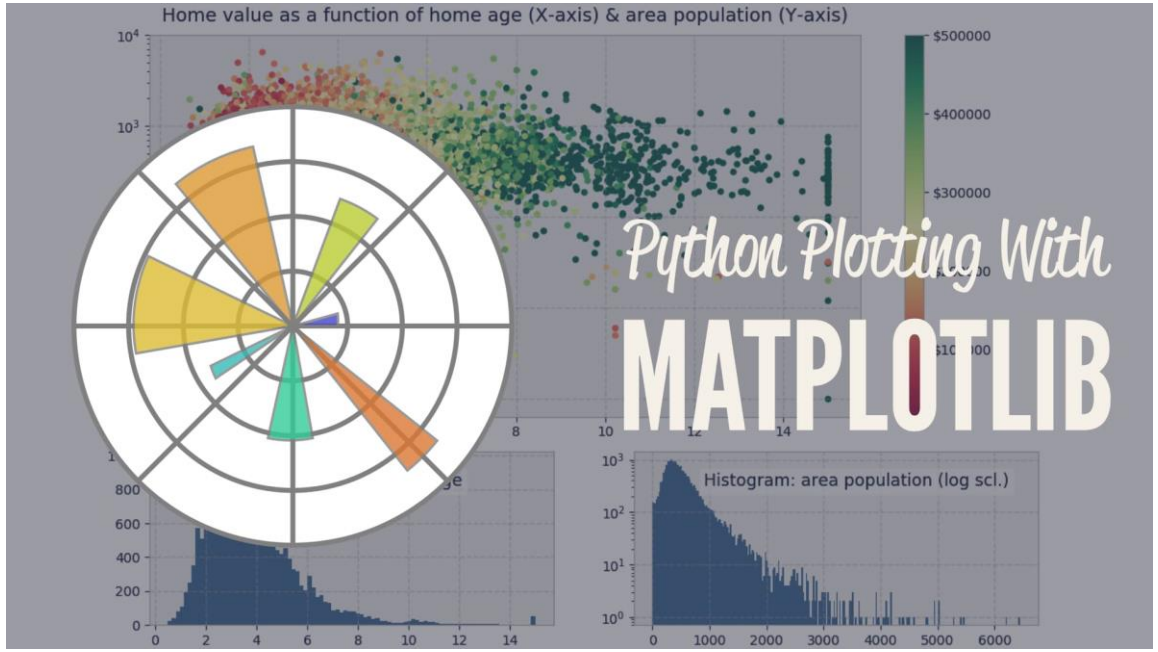
There's a package for basically everything!

- Statistical analysis
- Graphing
- Graphical interfaces, etc.

Example for graphing: Matplotlib

- https://matplotlib.org/
- Create everything from bar graphs to heat maps

Try looking up something that interests you and see if there's a Python package for it!



QUESTIONS?

Contact me

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@LoL-Genius

417devops@gmail.com

It is my hope that this course is easy to understand and follow

Have a question or want additional details? Just reach out!

If you want to know more about my work (LoL Genius) or have questions about something you're building, LMK!