

Title: Course Review, Prompt Engineering for Data Analysis (Python, Pandas, ChatGPT)



TL;DR*: Unlock the potential of ChatGPT for data analysis with 'Prompt Engineering for Data Analysis (Python, Pandas, ChatGPT)' on Udemy. This hands-on course offers real-world examples and projects, showcasing ChatGPT as an intelligent advisor and coding partner. Get customized code, explanations, and learn how to streamline your data science workflow with ChatGPT. Highly recommended for data science enthusiasts and professionals.

Introduction: Are you ready to learn how to unlock the full potential of ChatGPT for your data science projects? Having recently completed '[Prompt Engineering for Data Analysis \(Python, Pandas, ChatGPT\)](#)' on Udemy, I'm excited to share that this exceptional course will do just that. The course takes a 'team programming' approach, whereby you, the instructor and ChatGPT collaborate to craft python code motivated by practical examples and hands-on exercises. These examples and exercises not only deepened my understanding of Python and Pandas but also demonstrated how ChatGPT can streamline the workflow of data science projects. If you would like to get a glimpse into the future, where data analysis becomes a seamless collaboration between human and machine, then this course is for you.

Course Content and Structure: The course is structured into three main sections to facilitate a comprehensive learning experience. It begins with a motivating example using the Titanic's passenger list to demonstrate data analysis and visualization. Additionally, this section provides introductions to ChatGPT, prompt engineering, and setting up the necessary tools like Anaconda and Jupyter notebooks (an option to use Google's Collab is also provided). The subsequent section provides a solid grounding in essential Python and Pandas concepts, all taught with the assistance of ChatGPT. If you're already well-versed in Python, you can skip the 'Python Crash Course' videos. Finally, the course culminates in four exciting data science projects, primarily drawn from the areas of business and finance. These projects integrate all the previously covered elements, showcasing the true power of ChatGPT as an intelligent advisor to boost your data science productivity. The

estimated duration of videos is 10.5 hours. It will certainly take you much longer to complete, but the time and effort will be well worth it.

Hands-on Approach and Real-world Examples: The course takes a hands-on approach that immerses you in practical learning right from the start. As you progress through each video, the instructor shares his screen, guiding you through real-world examples and encouraging you to apply what you've learned in your own Jupyter notebook. With this approach you see how ChatGPT can act as an intelligent Python and Pandas coding assistant throughout your data science project. The instructor demonstrates the true power of ChatGPT by prompting it to design custom code aligned specifically to your project.

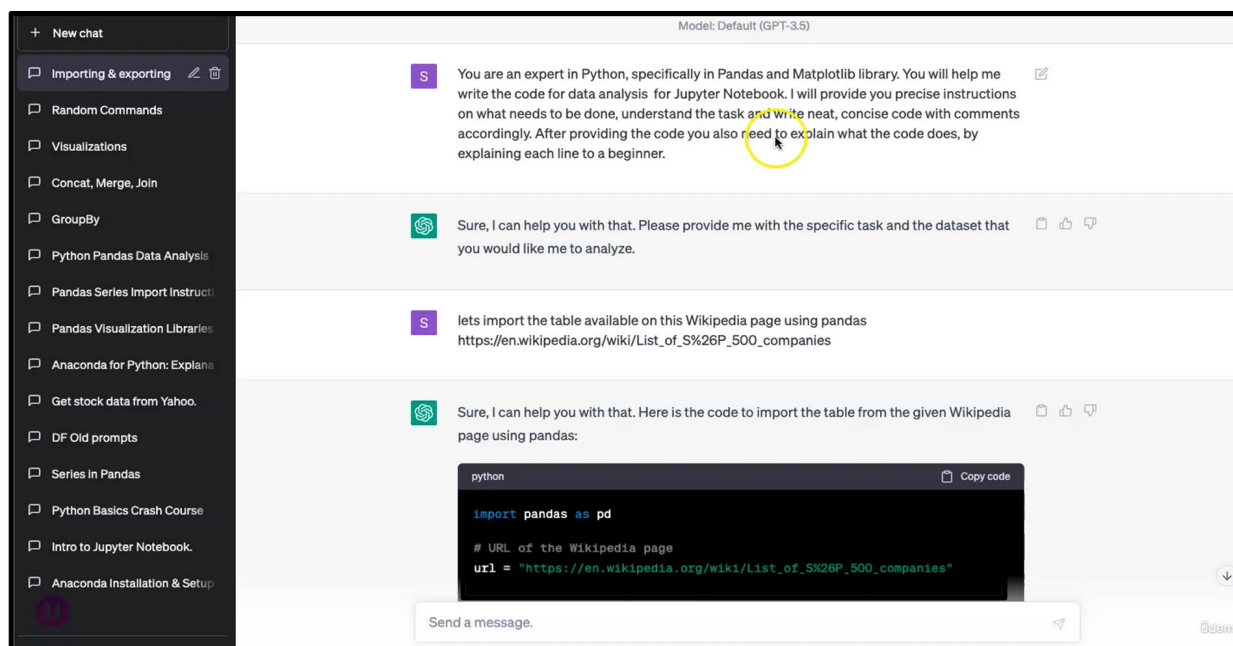


Image 1. Here we can see that the instructor is emphasizing the need for an explanation of the code. Also by providing the url he needs, ChatGPT generates a line of code specific for the exact url.

By customizing the code generation based on your project's specifics, ChatGPT helps you transform prompts into usable code in Jupyter notebooks. By providing explanations for the code generated prevents code parroting and promotes understanding. I personally found myself using this approach on my own data analysis projects, where ChatGPT proved to be an invaluable 'team-programming' partner. With ChatGPT as your intelligent advisor, your data science workflow becomes more efficient, and you gain a deeper understanding of coding principles.

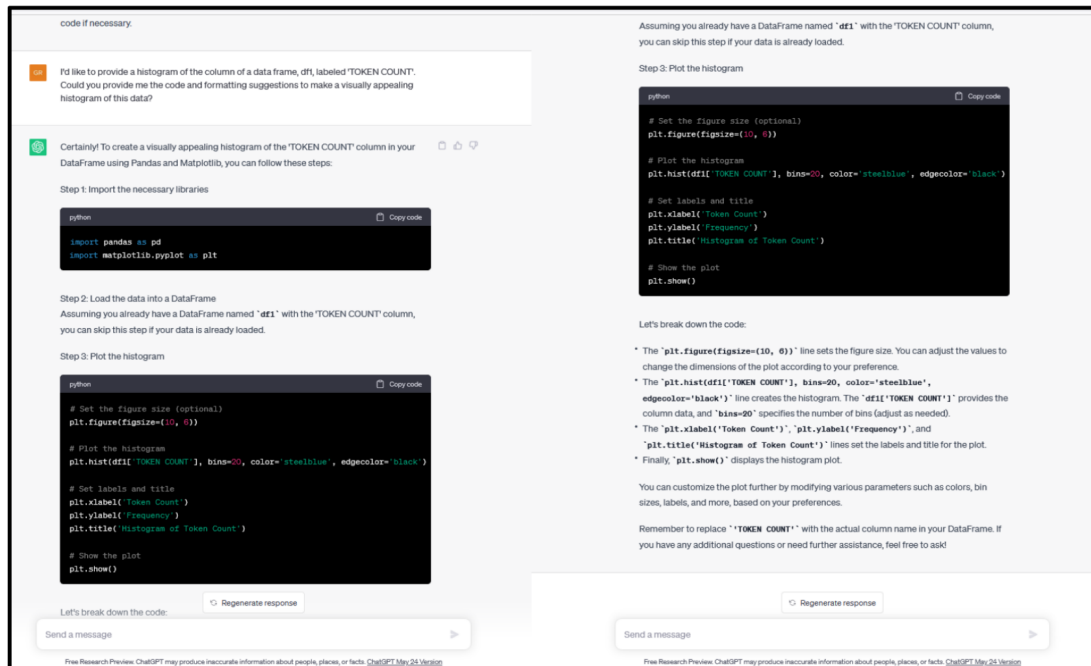


Image 2. Here I've provided a side-by-side screen shot of a prompt I used for my own project, asking ChatGPT how best to create a histogram and format it. ChatGPT's response was too long to fit onto a single screen shot.

In my own use case, I asked ChatGPT to help me with plotting a histogram in a visually appealing manner. I know how to do this in R, but I have less experience with it in Python, Pandas and Matplotlib. In this case, the important part of the project was to know why, where and how a histogram of a certain part of my project was important. How to most effectively and correctly code this was secondary. Inspired by the examples from the course, I provide a simple set of prompts to ChatGPT. The first being a 'root prompt' to set the stage:

From now on, please act as a programmer experienced in Python and Pandas coding for data analysis and data science. Please provide answers to my questions as if I am knowledgeable about Python coding, but less experienced with Pandas. Please also provide an explanation of any code you suggest. Please start by asking me to submit my Python and Pandas question to you.

A follow-up prompt to ask my specific question:

I'd like to provide a histogram of the column of a data frame, df1, labeled 'TOKEN COUNT'. Could you provide me with the code and formatting suggestions to make a visually appealing histogram of this data?

With the code providing resulting in the following histogram with only a few slight modifications:

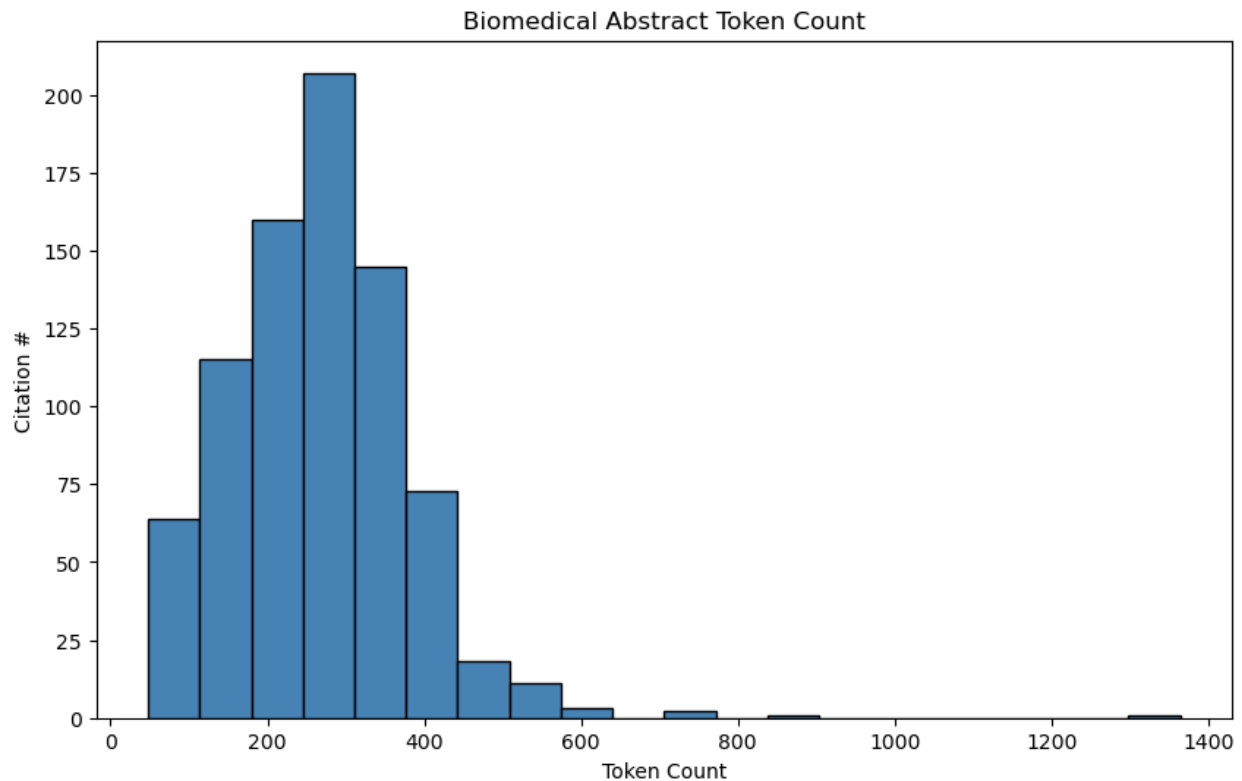


Image 3. A nicely formatted histogram provided with the code generated with ChatGPT.

Instead of spending my time googling the Matplotlib docs and relevant tutorials, ChatGPT provided me not only with the appropriate code, but it was also customized to my use case and dataset. In this way, I could focus on data analysis needs of my project and not the coding specific aspects of Python.

Final Thoughts and Recommendation: The course 'Prompt Engineering for Data Analysis (Python, Pandas, ChatGPT)' equips you with essential skills in prompt engineering to leverage ChatGPT for data analysis using Python, Pandas in your own data science tasks and projects. The instructor's expertise and engaging teaching style make the learning journey enjoyable and insightful. Through hands-on examples and inspiring projects, you witness the power of ChatGPT as an intelligent advisor and collaborative coding teammate. I wholeheartedly recommend this course to data science enthusiasts, professionals, and anyone interested in harnessing the potential of ChatGPT for their data science projects. Experience the transformative impact of ChatGPT and take your data analysis to new heights.

*Without apology, I was assisted in drafting and revising this entire review using ChatGPT. The TL;DR was written entirely by ChatGPT after reading my final copy. I did not use ChatGPT to write any of the code, although this seems to be one of the most promising use cases for LLM to date!