SCIENCE ACADEMY
Excellence in Teaching & Learning

Hi guys,

*I am Dr. **Junaid Qazi**. As a mentor and a research scientist, with over 17 years of professional experience, I have developed a skill set in data mining, analysis & modelling, project management, teaching & training and career advising, while working with academic and industrial giants in Asia, Europe and North America. In the past, I have trained hundreds of students in the class. Now, I am here to provide you with the skill set in the field of Data Science and Machine Learning. These are the most demanding skills in the world today!*

Dr. Junaid S. Qazi
PhD

LinkedIn https://www.linkedin.com/in/jqazi/

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Indeed, Data Science is in-demand and most satisfying career, where you will solve the most interesting problems and challenges in the world. Not only, you will earn and average salary of over $100,000 p.a., you will also see the ***impact of your work on other people, is not is amazing!!***

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*This course is specially designed for you guys. This is **one of the most comprehensive course on Udemy** which uses the power of Python to learn exploratory data analysis and machine learning algorithms. You will learn the skills to dive deep into the data and present solid conclusions for decision making.*

Dr. Junaid S. Qazi PhD

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Data Science bootcamps are costly, in thousands of dollars. However, this course is only a fraction of the cost and includes over 24 hours of ***HD lectures*** *along with* ***code notebooks*** *in details for every lecture and* ***practice exercises on real data*** *for each topic you cover.*

Let's have a quick overview on the topics we are going to cover in this course!

Dr. Junaid S. Qazi
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Instructor: Dr. Junaid S. Qazi, PhD

Python Essentials - A Crash Course

- **Python data types** — Numbers, Strings & print formatting, Lists, Dictionaries, Tuples, Sets, Booleans …. etc
- **Comparisons Operators**
- **if, else, elif statements.**
- **Loops (while & for) & range( )**
- **List Comprehension**
- **Functions and Lambda Expressions**
- **Map and Filter …. and much more……**

And the most important: Practice Exercise and then we will go through the solutions.

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Python For Data Analysis

- **NumPy —** (A **fundamental package for scientific computing** — Powerful and incredibly fast — Extremely important for Data Science) — **We will cover** arrays, array methods & attribute, Indexing, Slicing, Broadcasting, Boolean Masking, Arithmetic Operations, Universal Functions and much more……
- **Pandas —** (An open source **library providing high-performance, easy-to-use data structures and data analysis tools** for the Python programming language) — **We will cover** Series, DataFrame, Indexing & Selection, Hierarchical Indexing, Data Cleaning, Preparation & Handling the Missing Data, Data Wrangling: Merging/ Joining, Combining/Concatenation, Data Aggregation and GroupBy….

And the most important:

Practice Exercise and two full length project using real data sets for data analysis.

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Python For Data Visualization

- **Matplotlib —** (The most popular plotting library for Python — Topics include: basic data plotting, Object Oriented approach, creating figures & subplots, decorating the figures and advance plotting options……)
- **Seaborn —** (Provides a high-level interface for drawing attractive statistical graphics — Topics include: Distribution, Categorical, Matrix and Regression Plots, Axis grids, Figure Aesthetics …..)

At the end of each section, Practice Exercise / Project using real data sets for your practice.

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Python For Data Visualization

- **Pandas —** (Pandas comes with its built-in data visualization capabilities, which is very handy for quick visualization. We will explore a wider variety of plotting options that comes with pandas in this section.)
- **Plotly & Cufflinks for Interactive & Geographical Plotting—** (We will learn the interactive plotting using these state-of-the-art libraries. We will also discuss the plotly's capabilities for geographical plotting in this section.)

At the end of each section, Practice Exercise / Project using real data sets for your practice.

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Python For Data Analysis and Data Visualization

"Capstone Projects"

- **Real stock exchange data of oil companies and leading banks —** (This is your opportunity to put a seal on your data analysis and data visualization skills using real stock price data. You can either directly read the data using pandas-data-reader (code will be provided) or use the files which are provided in the course material. We all know that the world's oil market is crazy and it has significant effect on the global economy. We will explore the ups and downs in the stock price of USO and WTI.
- **Emergency - 911 Calls from Montgomery County, PA. —** (This is going to be your self-study project, however, the solutions notebook will be provided that you can consult, whenever you need.

Python For Data Analysis and Data Visualization

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Lots and lots of practice!!!

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Python For Machine Learning

"scikit-learn"

- Linear Regression
- Logistic Regression
- K Nearest Neighbours (KNN)
- Decision Trees and Random Forests
- Support Vector Machines (SVMs)
- K-Means Clustering
- Principal Component Analysis (PCA)

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Python For Machine Learning

"scikit-learn"

Each Machine Learning section will start with a detailed theory lecture and working principle behind the model. We than move on to the Jupyter notebook for hands-on training using real data project.

At the end of each section, you will practice your skills using additional real data projects. So, each section will involve at-least two real data project.

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Python For Machine Learning

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Additional topics in the course

Our focus is your training and to provide you range of career options. In this section, we will learn how the Recommender Systems work. We will also explore the Natural Language Processing using another very important library in Python "NLTK". Once again, using real data and hands-on training.

I have plans to keep this section dynamic. So the idea is to add additional topics with time to keep you updated with more and more career options. With time, this section may grow!

So, what are you waiting for!

Join me in the course to become a data scientist!

You got an opportunity to fulfill your dreams and to earn handsome amount of money.

You are going to learn the skills to make the different in the society using the power of the data!

All of this comes with the fraction of the cost of any of your undergraduate course in the University along with 30 days money back guarantee.

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I am so excited and looking forward to see you in the course. Join me in this exciting journey.

See you in the next lecture!

Good Luck!

Dr. Junaid S. Qazi
PhD