

Why to learn Python?

Applications

- **Its ease of use.** For those who are new to coding and programming, Python can be excellent first step. It is relatively easy to learn, it helps to build good programming knowledge.
- **Its simple syntax.** Python is easy to read and write also to understand, as its syntax is more like English.
- **Open source.** Python can be used by anyone for free as it is open-source programming language. There is a community that supports and develops the ecosystem, adding their own libraries.

We know Python is so popular at the moment, but why should you learn how to use it? The reasons:

- **Python developers are in demand.**

Across a wide range of fields, there is a demand for those with Python skills. If you're looking to start or change your career, it could be a vital skill to help you. Python can be used in many emerging technologies, such as

1. AI and machine learning
2. Data analytics
3. Data visualisation
4. Programming applications
5. Web development
6. Language development.... and many more

- **It could lead to a well-paid career.**

Data suggests that the median annual salary for those with python skills is high also it depends on field you are working for either data science or ai machine learning.

1. AI and machine learning

Because Python is such a stable, flexible, and simple programming language, it's perfect for various machine learning (ML) and artificial intelligence (AI) projects. In fact, Python is among the favourite languages among data scientists, and there are many Python machine learning and AI libraries and packages available.

2. Data analytics

Much like AI and machine learning, data analytics is another rapidly developing field that utilises Python programming. At a time when we're creating more data than ever before, there is a need for those who can collect, manipulate and organise the information.

Python for data science and analytics makes sense. The language is easy-to-learn, flexible, and well-supported, meaning it's relatively quick and easy to use for analysing data. When working with large amounts of information, it's useful for manipulating data and carrying out repetitive tasks.

3. Data visualisation

Data visualisation is another popular and developing area of interest. Again, it plays into many of the strengths of Python. As well as its flexibility and the fact it's open-source, Python provides a variety of graphing libraries with all kinds of features.

Whether you're looking to create a simple graphical representation or a more interactive plot, you can find a library to match your needs. Examples include Pandas Visualization and Plotly. The possibilities are vast, allowing you to transform data into meaningful insights.

4. Programming applications

You can program all kinds of applications using Python. The general-purpose language can be used to read and create file directories, create

GUIs and APIs, and more. Whether it's blockchain applications, audio and video apps, or machine learning applications, you can build them all with Python.

5. Web development

Python is a great choice for web development. This is largely due to the fact that there are many Python web development frameworks to choose from, such as Django, Pyramid, and Flask. These frameworks have been used to create sites and services such as Spotify, Reddit and Mozilla.

Thanks to the extensive libraries and modules that come with Python frameworks, functions such as database access, content management, and data authorisation are all possible and easily accessible. Given its versatility, it's hardly surprising that Python is so widely used in web development.

6. Game development

Although far from an industry-standard in game development, Python does have its uses in the industry. It's possible to create simple games using the programming language, which means it can be a useful tool for quickly developing a prototype. Similarly, certain functions (such as dialogue tree creation) are possible in Python.

If you're new to either Python or game development, then you can also discover how to make a text-based game in Python. In doing so, you can work on a variety of skills and improve your knowledge in various areas.

7. Language development

The simple and elegant design of Python and its syntax means that it has inspired the creation of new programming languages. Languages such as Cobra, CoffeeScript, and Go all use a similar syntax to Python.