

Top 10 Python Applications in Real World

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We are living in a digital world that is completely driven by chunks of code. Every industry depends on software for its proper functioning be it healthcare, military, banking, research, and the list goes on. We have a huge list of programming languages that facilitate the software development process. One of these is Python which has emerged as the most lucrative and exciting programming language. As per a survey it is observed that *Python is the main coding language for more than 80% of developers*. The main reason behind this is its extensive libraries and frameworks that fuel up the process.



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Got It !

Top Python Applications in Real World

Python has been at the forefront of Machine learning, Data Science, and Artificial Intelligence innovation. Further, Python applications offers provides ease in building a plethora of apps, web development processes, and a lot more. In this blog, we will discuss the top 10 Python applications in the real world in a detailed manner. So let's get started:

1. Web Development

It is one of the most astonishing applications of Python. This is because Python comes up with a wide range of frameworks like Django, Flask, Bottle, and a lot more that provide ease to developers. Furthermore, Python has inbuilt libraries and tools which make the web development process completely effortless. The use of Python for web development also offers:

- *Amazing visualization*
- *Convenience in development*
- *Enhanced security*

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2. Machine Learning and Artificial Intelligence

[Machine Learning](#) and [Artificial Intelligence](#) are the hottest subjects right now. Python along with its inbuilt libraries and tools facilitate the development of AI and ML algorithms. Further, it offers simple, concise, and readable code which makes it easier for developers to write complex algorithms and provide a versatile flow. Some of the inbuilt libraries and tools that enhance AI and ML processes are:

- *Numpy for complex data analysis*
- *Keras for Machine learning*
- *SciPy for technical computing*
- *Seaborn for data visualization*

3. Data Science

Data science involves data collection, data sorting, data analysis, and data visualization. Python provides amazing functionality to tackle statistics and complex mathematical calculations. The presence of in-built libraries provides convenience to data science professionals. Some of the popular libraries that provide ease in the data science process are TensorFlow, Pandas, and Socket Learning. These libraries provide an ecosystem for fine-tuning data models, data preprocessing, and performing complex data analysis.

4. Game Development

With the rapidly growing gaming industry, [Python](#) has proved to be an exceptional option for game development. Popular games like Pirates of the Caribbean, Bridge Commander, and Battlefield 2 use Python programming for a wide range of functionalities and add-ons. The presence of popular 2D and 3D gaming libraries like pygame, panda3D, and Cocos2D makes the game development process completely effortless.

5. Audio and Visual Applications

Audio and video applications are undoubtedly the most amazing feature of Python. Python is equipped with a lot of tools and libraries to accomplish your task flawlessly. Applications that are coded in Python include popular ones like Netflix, Spotify, and YouTube. This can be handled by libraries like

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- *Mingus*
- *SciPy*
- *OpenCV*

6. Software Development

Python is just the perfect option for software development. Popular applications like Google, Netflix, and Reddit all use Python. This language offers amazing features like:

- *Platform independence*
- *Inbuilt libraries and frameworks to provide ease of development.*
- *Enhanced code reusability and readability*
- *High compatibility*

Apart from these Python offers enhanced features to work with rapidly growing technologies like Machine learning and Artificial intelligence. All these embedded features make it a popular choice for software development.

7. CAD Applications

CAD refers to computer-aided design; it is the process of creating 3D and 2D models digitally. This application has replaced manual draft and is used by architects, product designers, and construction managers to design products with extremely high consistency. Python is embedded with amazing applications like Blender, FreeCAD, open cascade, and a lot more to efficiently design products. These provide enhanced features like technical drawing, dynamic system development, recordings, file export, and import.

8. Business Applications

Python offers excellent security and scalability features that make it perfect for delivering high-performance business applications. It has inbuilt libraries and tools like:

- *Odoo is business management software that provides you with an automated solution for your business process.*
- *Tryton is easy-to-use open-source business software. It has fully integrated features like financial accounting, sales, CRM, purchasing,*

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All these distinguishing features make it fit for creating business applications.

9. Desktop GUI

Python is an interactive programming language that helps developers to create GUIs easily and efficiently. It has a huge list of inbuilt tools for Python usage are PyQT, kivy, wxWidgets, and many other libraries like them to build a fully functional GUI in an extremely secure and efficient manner.

10. Web Scraping Application

[Web scraping](#) is an automated process used to extract information from websites in an easier and faster way. The information is used by researchers, organizations, and analysts for a wide variety of tasks. Python has a wide range of features that make it suitable for web scraping some of them are:

- *A concise syntax enhances readability and saves you time.*
- *A wide range of libraries and tools like pandas, matplotlib, and Selenium makes the web scraping process easy and efficient.*
- *Easy to use and understand*

Some other real-world applications of Python are:

- [Robotics](#) and automation by the use of inbuilt libraries and tools like PyDy, Dart, PyRobot, and Pyro.
- *Image processing: some of the amazing libraries and tools for image processing are Blender, OpenCV, Houdini, and PIL.*
- *Scientific applications are facilitated by popular libraries like [Pandas](#), [Matplotlib](#), SciPy, and many more*

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Python is a concise and extremely powerful language & that's why the application of Python is rapidly gaining popularity. It has been the epicentre of the most amazing technologies like AI, automation, and machine learning. Further, it is used to facilitate hot subjects like data analysis and data visualization. In this blog, we have tried to give you a basic idea about the **Top 10 Python applications in the real world**. We hope that you found this helpful!

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