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Summary Python as Multi-Paradigm Programming Language.

**Introduction**

The paper represents a documented study of Phyton Programming Language, written and conducted by the authors: Nimit Thaker and Mohanbhai Petel Abhilash Shukla, from Charotar University of Science and Technology, India.

The purpose of the study is to show how and why Phyton, in the last years, have become the best suited and best opted language for developers in almost all kind of applications, the most grossing and highly popular programming language and the ultimate goal of this paper is to let the Application developers and technology enthusiasts experience the power of Phyton and also to provide them in-detail knowledge of its libraries, packages and frameworks that can develop and support any kind of applications.

**Methodology**

Is based on a complete study and analysis of the authors regarding the subject.

**Results**

Python is an open source language, which enables easy and clear programming and can easily incorporate object-orientated imperative, functional and procedural programming paradigms with an enriched comprehensive standard library.

Python has strong characteristics as: is interpreted, interactive, object-orientated, is a beginner addressed language, convenient to write and readable, portable, extendable, it has data base support and easy memory management, all of these throughout his interface and features.

The role of Python is in various modern discipline and applications, with its libraries and modules, as: Data science (Numpy, Pandas, Matplotlib, etc); Networking and Digital Forensics (Socket Programming, Network Port Scanning, Geolocation Extraction); Artificial Inteligence (AIMA, PyDatalog, easyAI, etc); Phyton for Machine Learning and Deep Learning (Pybrain, PyML, Torch, Accord.Net, Azure Ml Studio, Amazon Machine Learning, Spark MLLIS, Caffe, Microsoft ENTK, Pytorch, etc); Phyton for IoT (CoApthon, Zorg, Pyota).

**Key insights**

I hold a key interest in :

* **DATA SCIENCE**, working with Numpy because it is one of the fundamental packages for scientific computing in Python and is extensively used in fields such as data science, machine learning, signal processing, and more; Matplotlib because is a versatile and powerful library for creating static and interactive visualizations in Python, it has simplicity, flexibility, and extensive documentation; Pandas is a versatile and user-friendly library that simplifies the process of working with structured data in Python, it has rich functionality, intuitive syntax, and wide adoption in the data science community;
* **NETWORKING AND DIGITAL FORENSICS,** working in Web Development (as Python offers web frameworks like Django and Flask which are commonly used for building web applications and APIs. These frameworks facilitate the development of network-based applications, RESTful APIs, and web services); Digital Forensics with File Analysis (in which Python is well-suited for analyzing digital artifacts and file formats commonly encountered in digital forensics investigations).

**Conclusion**

The studied paper is documented and with short but extensive and important knowledge of how Python program can be used and implement it in our modern life with his various technology applications.

Python is one of the most flexible programming languages being used in various areas of technology which leads for revolutionizes the development process in every kind of applications.