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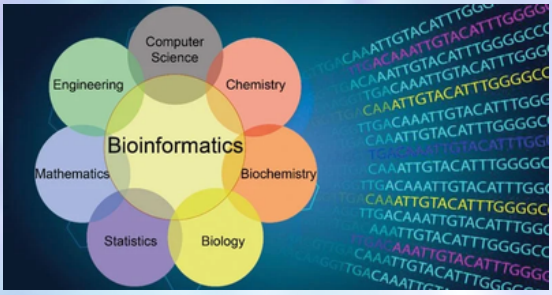
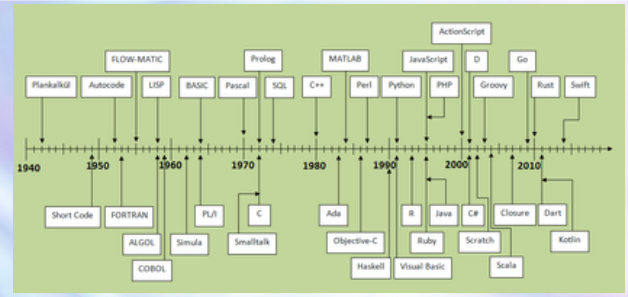
Byte Quest

Department of CSE

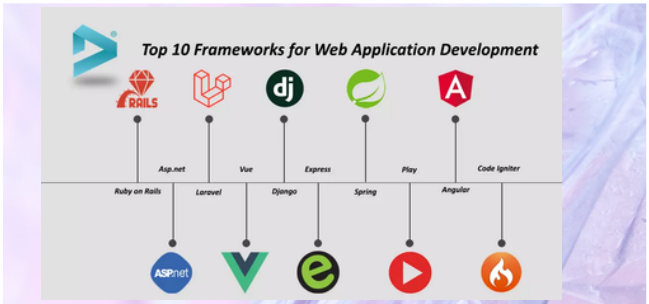


BIOINFORMATICS

NETWORK SECURITY PROTOCOLS



PROGRAMMING LANGUAGES EVOLUTION



WEB DEVELOPMENT FRAMEWORKS

Department Vision

To be a center for academic excellence in the field of Computer Science and Engineering education to enable graduates to be ethical and competent professionals.

Department Mission

To enable students to develop logic and problem solving approach that will help build their careers in the innovative field of computing and provide creative solutions for the benefit of society.

FACULTY COORDINATORS

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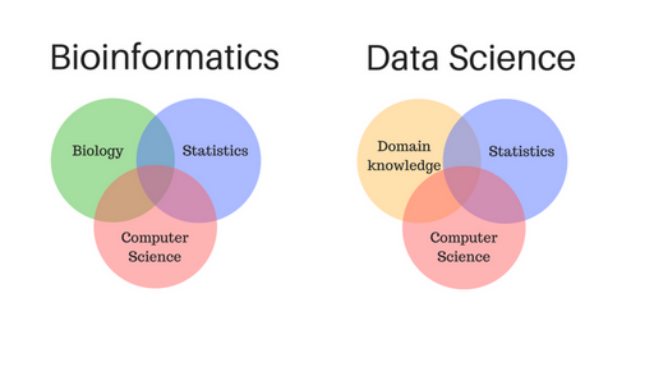
BIOINFORMATICS

Bioinformatics, as related to genetics and genomics, is a scientific subdiscipline that involves using computer technology to collect, store, analyze and disseminate biological data and information, such as DNA and amino acid sequences or annotations about those sequences.



Bioinformatics. The role of bioinformatics in biological research can be compared with the role of data analysis in the age of information and the Internet. In earlier days, the primary challenge was getting to the information. Advances in reading DNA sequences have lowered that barrier substantially. Going forward, the challenge is how to understand and interpret the information that has been collected. Because the data sets are large, whether you're talking about information about website visits or the human genome, computer-based methods are the default approach. In the end, bioinformatics work with human genomes seeks to discover practical insights about human health and biology with all its complexity.

NETWORK SECURITY PROTOCOLS

Network security protocols are network protocols that ensure the integrity and security of data transmitted across network connections. The specific network security protocol used depends on the type of protected data and network connection. Each protocol defines the techniques and procedures required to protect the network data from unauthorized or malicious attempts.

Open Systems Interconnection (OSI) is a reference model for how applications communicate over networks. It shows how each layer of communication is built on top of the other, from the physical wiring to the applications that attempt to communicate with other devices over the network.

IPsec is a protocol and algorithm suite that secures data transferred over public networks like the Internet. The Internet Engineering Task Force (IETF) released the IPsec protocols in the 1990s. They encrypt and authenticate network packets to provide IP layer security.

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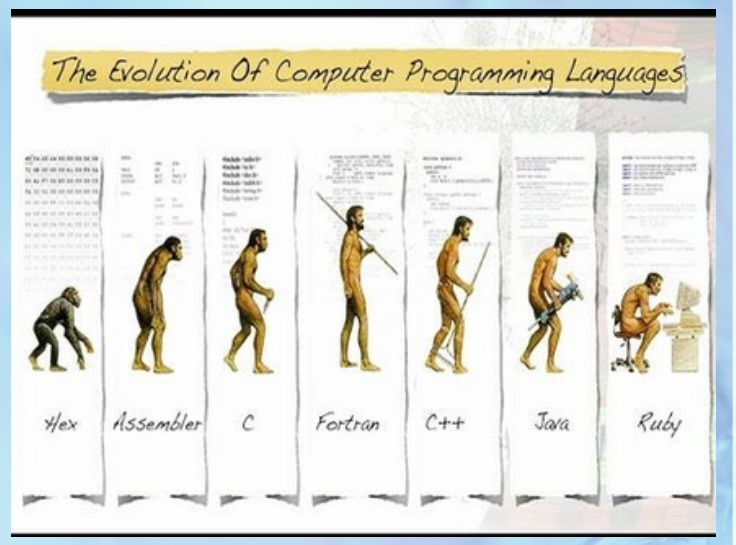
PROGRAMMING LANGUAGES EVOLUTION

Programming Language is indeed the fundamental unit of today's tech world. It is considered as the set of commands and instructions that we give to the machines to perform a particular task. For example, if you give some set of instructions to add two numbers then the machine will do it for you.



Languages are having a long and rich history of their evolution? And with a similar concern, here in this article, we'll take a look at the evolution of Programming Languages over the period.

In the computer world, we have about 500+ programming languages with having their own syntax and features. And if you type who's the father of the computer, then the search engine will show you the result as to Charles Babbage but the father of the computer didn't write the first code. It was Ada Lovelace who has written the first-ever computer programming language and the year was 1883.

1883: The Journey starts from here…!!
1949: Assembly Language
1952: Autocode
1957: FORTRAN
1958: ALGOL
1959: COBOL
1964: BASIC
1972: C
2000: C#
2009: GO
2011: Kotlin
2014: Swift

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WEB DEVELOPMENT FRAMEWORKS

A web framework (WF) or web application framework (WAF) is a software framework that is designed to support the development of web applications including web services, web resources, and web APIs

As the design of the World Wide Web was not inherently dynamic, early hypertext consisted of hand-coded HTML text files that were published on web servers. Any modifications to published pages needed to be performed by the pages' author. In 1993, the Common Gateway Interface (CGI) standard was introduced for interfacing external applications with web servers, to provide a dynamic web page that reflected user inputs.[3]
Original implementations of the CGI interface typically had adverse effects on the server load, however, because each request started a separate process. More recent implementations utilize persistent processes amongst other techniques to reduce the footprint in the server's resources and offer a general performance boost.

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