



Nallamuthu Gounder Mahalingam College

(An Autonomous Institution, Affiliated to Bharathiar University)

90, Palghat Road, Pollachi - 642001, Coimbatore, Tamil Nadu, India.

95th Rank in NIRF –2023 - Among Colleges in India.



ICT - AI Tools

(Sample)



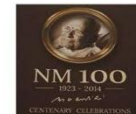
NGM COLLEGE, POLLACHI

DEPARTMENT OF COMPUTER SCIENCE WITH

ARTIFICIAL INTELLIGENCE & MACHINE LEARNING

ICT-Enabled Tools - AI as a Teaching & Learning Pedagogical tool

For Effective Teaching and Learning



S.No	Name of the Faculty	Subject code & Name	Tools Used	Class	Semester	No of Student beneficiaries
1	Dr.S.Niraimathi	22UA13 Introduction to Artificial Intelligence	Google Class Room Code: tycqmec InteractiveAI Learning Tool: chatpdf & Gamma.ai introduced	II BSc CS with AI & ML	III	18
2	Dr.S.Niraimathi	22UA14 Introduction to Machine Learning	Google Class Room Code: Tycqmec InteractiveAI Learning Tool: chatpdf & Gamma.ai introduced	II BSc CS with AI & ML	IV	18
3	Dr.S.Niraimathi	Naan Mudhalvan – Industry 4.0	Google Class Room Code: po7yz7o InteractiveAI Learning Tool: chatpdf &	I BSc CS with AI & ML	II	44



Nallamuthu Gounder Mahalingam College

(An Autonomous Institution, Affiliated to Bharathiar University)

90, Palghat Road, Pollachi - 642001, Coimbatore, Tamil Nadu, India.

95th Rank in NIRF –2023 - Among Colleges in India.



			Gamma.ai introduced			
4	Dr.S.Niraimathi	23UA12 Operating System	Google Class Room Code: po7yz7o InteractiveAI Learning Tool: chatpdf & Gamma.ai introduced	I BSc CS with AI & ML	II	44

In order to remove the limitations of traditional teaching pedagogy AI Pedagogy comes in to play. AI is not a replacement but a complementary pedagogy to help improve the monotonous traditional pedagogy.

ChatPDF and gamma.ai are the AI tools and the new pedagogy using these tools has been implemented.

ChatPDF

CHATPDF is an interactive Tool which gives the summary of the pdf and generates questions pertaining to the content uploaded by the Staff. This link once shared with the students become the interactive content where the students can pose whatever queries pertaining to the content and chatpdf immediately provides solution to the query with references from the document and beyond

With ChatPDF, the PDFs are loaded and the generated summary and the questions are shared to the students through the appropriate links generated by chatPDF. The generated PDF link is posted in the Google Classroom and once the Link is posted, the students can start interacting with the PDF. Students have the facility to post even MCQs and the ChatPDF responds with answer for it. With one click and simple text formatting, users can read these documents on any device, anywhere.

Gamma.ai

Gamma uses powerful AI to generate working presentations, documents, or webpages that users can customize and refine in under a minute. Users simply start writing in Gamma and it handles turning text into beautifully designed content.

In this context ChatPDF and gamma.ai has been used and the links for the same are shared through Google Classroom to the Students of First year and Second Year



Nallamuthu Gounder Mahalingam College

(An Autonomous Institution, Affiliated to Bharathiar University)

90, Palghat Road, Pollachi - 642001, Coimbatore, Tamil Nadu, India.

95th Rank in NIRF –2023 - Among Colleges in India.



Online AI Resources for posted by the staff for the core papers Introduction to AI, Machine Learning, Operating System and Naan Mudhalvan - Industry4.0 using CHATPDF, gamma.ai and the screenshot of response from Students

Operating System

<https://www.chatpdf.com/c/OkXcGSAMXHGN3qjSfr6x1>

The screenshot displays a web browser window with multiple tabs. The active tab is 'chatpdf.com/c/OkXcGSAMXHGN3qjSfr6x1'. The main content area shows a PDF document titled 'lecture1423726024osintro.pdf'. The PDF content includes:

- Managing Hardware:**
 - The operating system is the program part of an overall computer system.
 - The main objective of operating system is to manage & control the various hardware resources of a computer system.
 - These hardware resources include processor, memory, and disk space and so on.
 - The program will use digital-to-analog to address the communicating with the hardware.
 - Operating system provides an easy handling procedure and display to users.
 - If a device is not functioning properly, the operating system cannot be communicate with the device.
- Providing an Interface:**
 - The operating system manages applications so that users can easily access, use and store files.
- Types of Operating Systems:**
 - It provides a stable and consistent way for applications to deal with the hardware without the concerning hardware details of the hardware.
 - If the program is not functioning properly, the operating system might take control, stop the application and display the appropriate error message.
 - Operating system components are divided into 3 parts:
 - Computer hardware
 - Operating system
 - Software

The chat interface on the right shows a question: "what is an operating system?" and a detailed answer: "Hello and welcome to the helpful PDF file on Operating Systems by Assistant Professor BIGHNARAJ NAIK! This document covers a range of topics including the evolution of operating systems, process management, memory management, and file systems. ... An operating system (OS) is a software program that serves as an intermediary between computer hardware and software applications. It manages computer hardware resources and provides services for computer programs. The primary goal of an operating system are to execute programs, make the computer system convenient for users, and efficiently utilize computer hardware. Furthermore, an operating system provides a stable and consistent way for applications to interact with hardware without needing to know the intricate details of the hardware. It controls and coordinates the use of hardware by users and applications, acting as the first program loaded into the computer's memory and remaining there throughout the system's operation. In essence, an operating system manages hardware resources such as the processor, memory, and disk space, provides an interface for users to interact with the computer system, and ensures the execution of programs in a controlled and efficient manner."



Nallamuthu Gounder Mahalingam College

(An Autonomous Institution, Affiliated to Bharathiar University)

90, Palghat Road, Pollachi - 642001, Coimbatore, Tamil Nadu, India.

95th Rank in NIRF –2023 - Among Colleges in India.



The screenshot shows a web browser window with multiple tabs. The active tab is ChatPDF, displaying a PDF document titled "lecture1423726024osintro.pdf". The PDF content includes a "TEXT BOOK" section with references to "Operating System Concepts" and "Modern Operating Systems". A "REFERENCE BOOK" section lists several textbooks. A chat window on the right contains the following text:

The evolution of operating systems has been significant over the years, with advancements in technology and changing user needs driving the development of more sophisticated operating systems. Here is a brief overview of the evolution of operating systems as discussed in the PDF file:

- Batch/Early Systems:** Early computers were large machines where users submitted jobs consisting of programming data and control information. The operating system managed the execution of these jobs, with users not directly interacting with the computer system.
- Multiprogrammed Systems:** Multiprogramming increased CPU utilization by organizing jobs in memory so that the CPU always had a job to execute. The operating system kept several jobs in memory simultaneously, switching between them as needed to maximize CPU efficiency.
- Personal Computer Systems/Desktop Systems:** Personal computers emerged in the 1970s as smaller and less expensive microcomputers. These systems focused on maximizing user convenience and responsiveness, with file protection becoming necessary as other users could access files on a PC. Lack of protection made it easy for malicious programs to disrupt data.
- Modern Operating Systems:** Today's operating systems, such as Windows, macOS, and Linux, have evolved to provide advanced features like multitasking, virtual memory management, graphical user interfaces, networking capabilities, and security mechanisms. These operating systems cater to a wide range of devices, from personal computers to servers and mobile devices, offering a user-friendly experience with robust system management capabilities.

Overall, the evolution of operating systems has been driven by the need for improved efficiency, usability, security, and compatibility with a diverse range of hardware and software applications.

<https://www.chatpdf.com/c/IIUwKtyguRD4PLKwtwbk>

The screenshot shows a web browser window with multiple tabs. The active tab is ChatPDF, displaying a PDF document titled "Steps in booting a computer.pdf". The PDF content includes a header for "NIELIT Gorakhpur" with course and subject details. It lists the steps in the booting process: BIOS and Setup Program, Power-On-Self-Test (POST), Operating System (OS) Loads, System Configuration, System Utility Loads, and Users Authentication. A flowchart diagram illustrates the booting process. A chat window on the right contains the following text:

Greetings! In this PDF file, you will learn about the booting process in a computer, specifically focusing on the six steps involved. From BIOS and Setup Program to Users Authentication, each step plays a crucial role in starting up your system smoothly.

Example questions:

- What is the significance of the Power-On-Self-Test (POST) in the booting process?
- How does the BIOS and Setup Program contribute to the overall functioning of the computer during booting?
- Can you explain the role of System Utility Loads in the booting process and why it is important for the system configuration?



Nallamuthu Gounder Mahalingam College

(An Autonomous Institution, Affiliated to Bharathiar University)

90, Palghat Road, Pollachi - 642001, Coimbatore, Tamil Nadu, India.

95th Rank in NIRF –2023 - Among Colleges in India.



Artificial Intelligence

The screenshot displays a web browser window with multiple tabs. The active tab shows a PDF document titled "lecture1423726024osintro.pdf". The PDF content includes the following sections:

- Managing Hardware**
 - The primary objective of operating systems is to manage & control the various hardware resources of a computer system.
 - These hardware resources include processors, memory, and disk space, etc.
 - The major goal is to manage in order to communicate with the hardware.
 - Implementing various protocols to ensure loading procedure and display to users.
 - If a device is not functioning properly, the operating system must be responsible to the device.
- Providing an Interface**
 - The operating system provides an interface so that users can interact with the hardware.
- Types of operating systems**
 - It provides a stable and consistent way for applications to interact with the hardware without the user being aware of the details of the hardware.
 - If the program is not functioning properly, the operating system takes control, stops the application and displays an appropriate error message.
 - Computer system components are divided into 3 parts:
 - Computer hardware
 - Operating system
 - Application

The chat interface on the right shows a conversation with Assistant Professor BIGNARAJ NAIK. The chat content includes:

Hello and welcome to the helpful PDF file on Operating Systems by Assistant Professor BIGNARAJ NAIK! This document covers a range of topics including the evolution of operating systems, process management, memory management, and file systems.

>> What are the different types of operating systems discussed in the document?
 >> How does the document explain the concept of process synchronization?
 >> Can you provide examples of scheduling algorithms mentioned in the PDF file?

what is an operating system

An operating system (OS) is a software program that serves as an intermediary between computer hardware and software applications. It manages computer hardware resources and provides services for computer programs. The primary goals of an operating system are to execute programs, make the computer system convenient for users, and efficiently utilize computer hardware.

Furthermore, an operating system provides a stable and consistent way for applications to interact with hardware without needing to know the intricate details of the hardware. It controls and coordinates the use of hardware by users and applications, acting as the first program loaded into the computer's memory and remaining there throughout the system's operation.

In essence, an operating system manages hardware resources such as the processor, memory, and disk space, provides an interface for users to interact with the computer system, and ensures the execution of programs in a controlled and efficient manner.

Types of operating systems

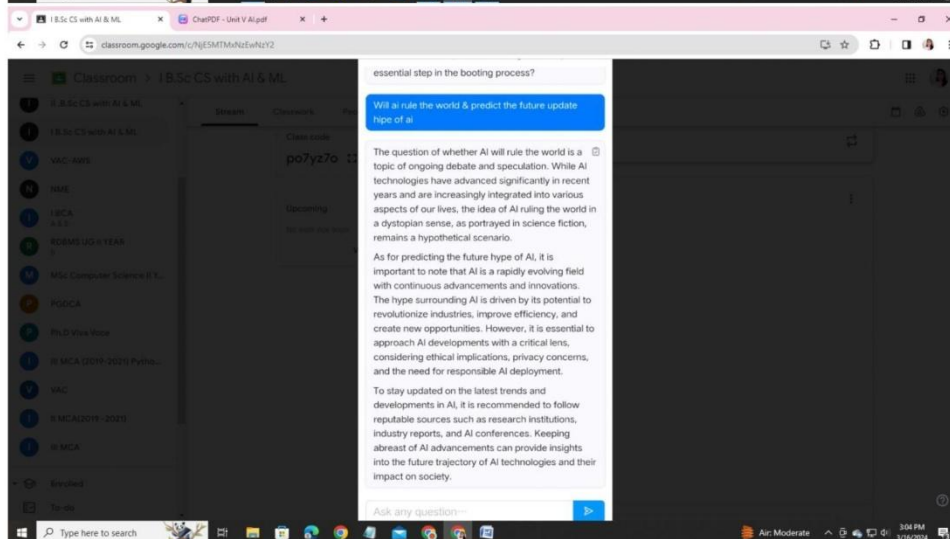
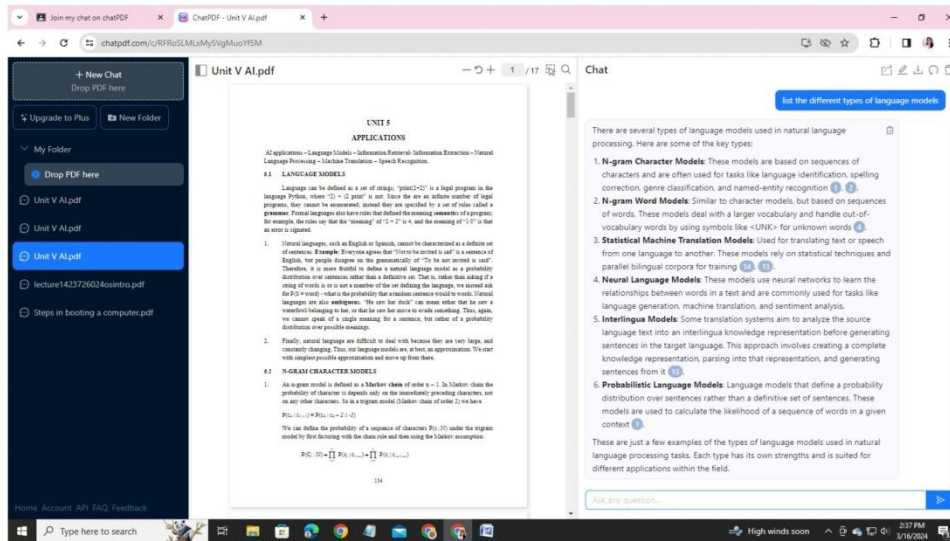


Nallamuthu Gounder Mahalingam College

(An Autonomous Institution, Affiliated to Bharathiar University)

90, Palghat Road, Pollachi - 642001, Coimbatore, Tamil Nadu, India.

95th Rank in NIRF –2023 - Among Colleges in India.





Nallamuthu Gounder Mahalingam College

(An Autonomous Institution, Affiliated to Bharathiar University)

90, Palghat Road, Pollachi - 642001, Coimbatore, Tamil Nadu, India.

95th Rank in NIRF –2023 - Among Colleges in India.



QUESTION:

Which one of the following are looping statements.
a.for ,b.break ,c.if , d.continue

ANSWER:

Among the options provided, the looping statements are 'a. for' and 'd. continue'.

- The 'for' statement is a looping statement used to iterate over a sequence of elements for a specified number of times.
- The 'continue' statement is also a looping statement that is used to skip the current iteration of a loop and proceed to the next iteration.

Therefore, 'a. for' and 'd. continue' are looping statements.

QUESTION:

Can you explain the role of the Operating System (OS) in the booting process and why it is essential for the computer to function properly?

ANSWER:

About AI machines in 2028

As of now, it is challenging to predict the exact capabilities and advancements of AI machines in 2028. However, based on the current rapid pace of AI development, it is reasonable to expect significant progress in various AI applications by 2028. AI technologies are likely to become more sophisticated, efficient, and integrated into various aspects of our daily lives.

In 2028, AI machines may have enhanced capabilities in areas such as natural language processing, computer vision, robotics, autonomous vehicles, healthcare diagnostics, personalized recommendations, and more. These advancements could lead to improved efficiency, productivity, and innovation across industries.

It is essential to consider the ethical implications and potential societal impacts of AI advancements as they continue to evolve. Continued research, regulation, and ethical considerations will be crucial in ensuring that AI technologies are developed and deployed responsibly for the benefit of society.

For the most accurate and up-to-date information on AI advancements in 2028, it is recommended to follow reputable sources in the field of artificial intelligence and technology.



Nallamuthu Gounder Mahalingam College

(An Autonomous Institution, Affiliated to Bharathiar University)

90, Palghat Road, Pollachi - 642001, Coimbatore, Tamil Nadu, India.

95th Rank in NIRF –2023 - Among Colleges in India.



The image displays two screenshots of a Google Classroom interface. The top screenshot shows a PDF document titled "Unit V AI.pdf" with the following text:

Greetings! In this helpful PDF file, you will learn about the booting process in a computer, specifically focusing on the six steps involved. From BIOS and Setup Program to Users Authentication, each step plays a crucial role in starting up your system smoothly.

Example questions:

- What is the significance of the BIOS and Setup Program in the booting process?
- How does the Power-On-Self-Test (POST) help in ensuring the operability of a computer system?
- Why is it important for the operating system to load properly during the booting process?

Below the questions, there are two blue buttons: "Java is a _____ language" and "Deadblock definition".

The bottom screenshot shows the same PDF document with the following text:

➤ What is the significance of the Power-On-Self-Test (POST) in the booting process?

➤ How does the BIOS and Setup Program contribute to the overall functioning of the computer during booting?

➤ Can you explain the role of System Utility Loads in the booting process and why it is important for the system configuration?

Below the questions, there is a blue button labeled "Deadblock definition".

A "deadblock" in computing typically refers to a situation where a program or process becomes unresponsive or "hangs," causing the system to freeze or stop functioning properly. This term is commonly used to describe a block of code or a specific operation that is causing the system to halt or become unresponsive. In such cases, the system may need to be restarted or the problematic process terminated to resolve the issue and restore normal operation.



Nallamuthu Gounder Mahalingam College

(An Autonomous Institution, Affiliated to Bharathiar University)

90, Palghat Road, Pollachi - 642001, Coimbatore, Tamil Nadu, India.

95th Rank in NIRF –2023 - Among Colleges in India.



The image displays two screenshots of a Google Classroom interface. The top screenshot shows a question: "What is the size of float and double in Java?" with a correct answer: "C) 64 and 32." The bottom screenshot shows a question: "Which of the following programming languages is widely used for developing AI applications?" with a correct answer: "A) Python." Both screenshots include references and a list of participants.

Top Screenshot:

ensuring the operability of a computer system?
 ▶ Can you explain the role of System Utility Loads in the booting process and why it is important for the system configuration?

What is the size of float and double in Java

In Java, the size of the float data type is 4 bytes (32 bits), and the size of the double data type is 8 bytes (64 bits) [T3]. These data types are used to represent floating-point numbers with single and double precision, respectively.

[T3] Java Primitive Data Types:
<https://docs.oracle.com/javase/tutorial/java/nutsandb>

What is the size of float and double in Java? A)32 and 64. B) 32 and 32. C) 64 and 32. D)64 and 64

The correct answer is: C) 64 and 32.

In Java, the float data type is 32 bits (4 bytes) and the double data type is 64 bits (8 bytes) [T3].

Ask any question...

Bottom Screenshot:

(POST) in Open with DocuLab - PDF Sign...

▶ How does the BIOS and Setup Program contribute to the overall booting process?
 ▶ Why is it important for the operating system to load correctly during booting?

Which of the following programming languages is widely used for developing AI applications?
 A) Python
 B) Java
 C) C++
 D) Ruby

A) Python

Python is widely used for developing AI applications due to its simplicity, readability, and extensive libraries and frameworks specifically designed for artificial intelligence and machine learning tasks. It is considered one of the top choices for AI development [T3].

References: [T3] - Brownlee, J. (2018). What Programming Language Should I Learn for Machine Learning? Machine Learning Mastery.



Nallamuthu Gounder Mahalingam College

(An Autonomous Institution, Affiliated to Bharathiar University)

90, Palghat Road, Pollachi - 642001, Coimbatore, Tamil Nadu, India.

95th Rank in NIRF –2023 - Among Colleges in India.



Which of these are selection statements in Java?

A. break
B. continue
C. for()
D. if()

D. if()
In Java, the "if" statement is a selection statement used for conditional branching. It allows the program to execute a certain block of code based on a specified condition. The "if" statement is fundamental for implementing decision-making in Java programs.
The other options provided are not selection statements: A. "break" is used to terminate loops or switch statements. B. "continue" is used to skip the current iteration of a loop and continue with the next iteration. C. "for()" is a loop statement used for iterating a specific number of times.

Properties are implemented using in Java.

Advantages of BIOS in booting system

The Basic Input/Output System (BIOS) plays a vital role in the booting process of a computer system. Here are some advantages of BIOS in the booting system:

- 1. Initialization of Hardware:** BIOS initializes and tests the hardware components of the computer during the Power-On-Self-Test (POST) phase. This ensures that all essential hardware components are functioning correctly before the operating system takes control (Page 2).
- 2. Loading the Operating System:** BIOS locates and loads the operating system from the specified boot device. It provides the necessary instructions for the operating system to start loading into the computer's memory (Page 2).
- 3. System Configuration:** BIOS stores and maintains the system configuration settings in the CMOS memory. These settings include information about the hardware components, boot sequence, date, and time. This allows users to customize and configure their system according to their requirements (Page 2).
- 4. Security Features:** BIOS can also provide security features such as password protection at the system level. Users can set passwords in the BIOS to

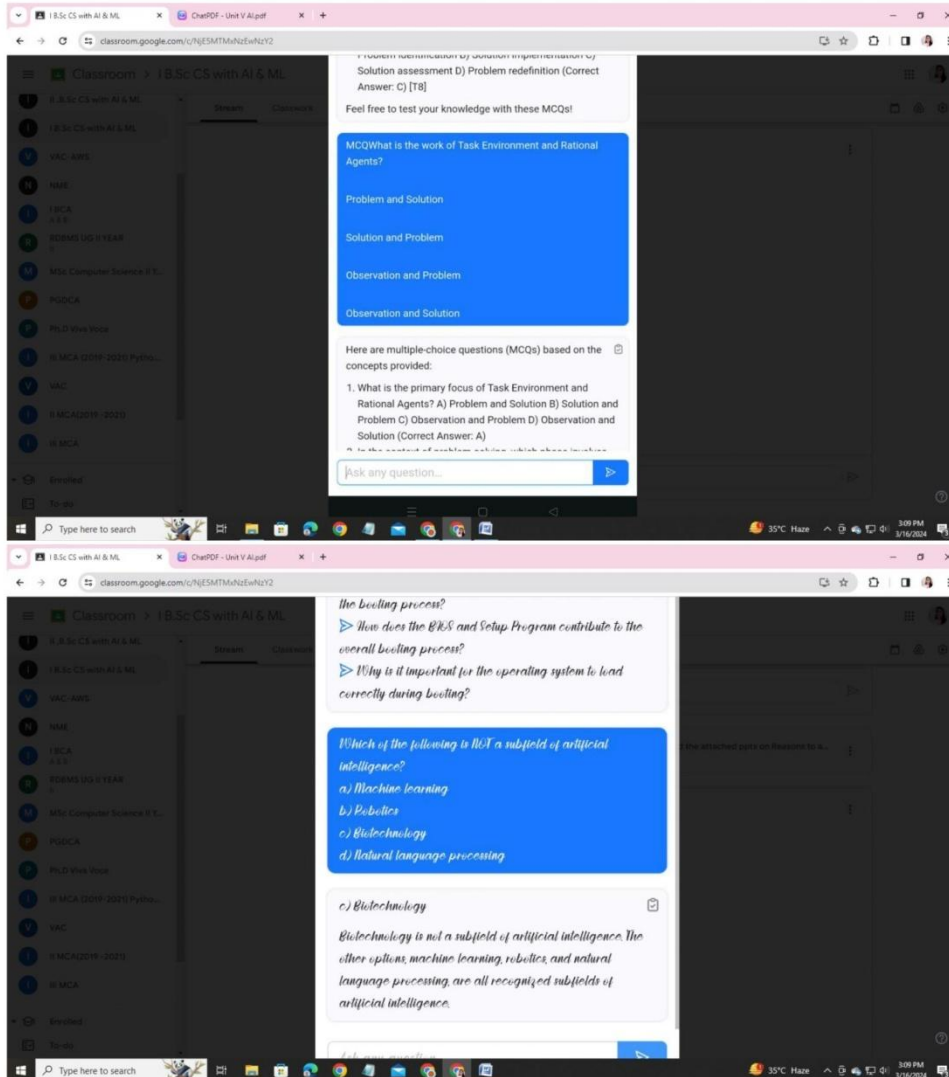


Nallamuthu Gounder Mahalingam College

(An Autonomous Institution, Affiliated to Bharathiar University)

90, Palghat Road, Pollachi - 642001, Coimbatore, Tamil Nadu, India.

95th Rank in NIRF –2023 - Among Colleges in India.



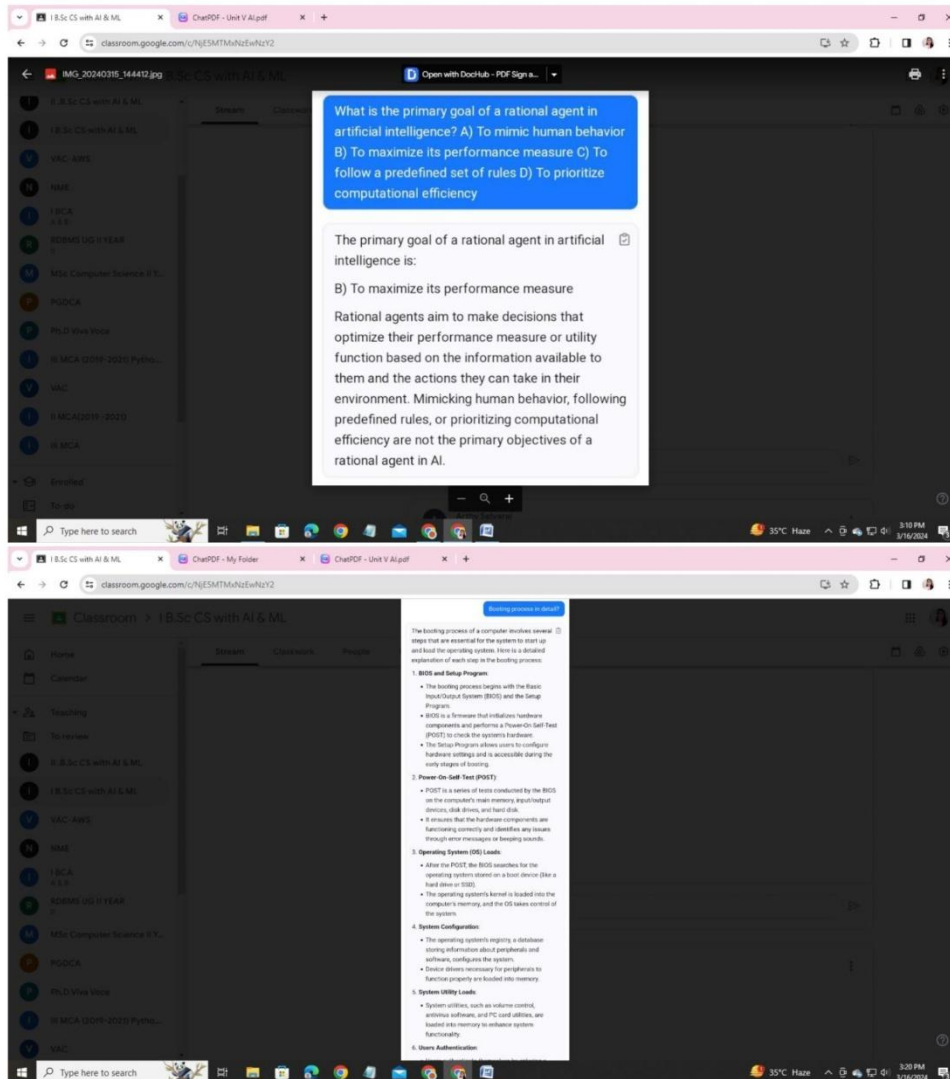


Nallamuthu Gounder Mahalingam College

(An Autonomous Institution, Affiliated to Bharathiar University)

90,PalghatRoad,Pollachi -642001,Coimbatore, Tamil Nadu, India.

95th Rank in NIRF –2023 - Among Colleges in India.



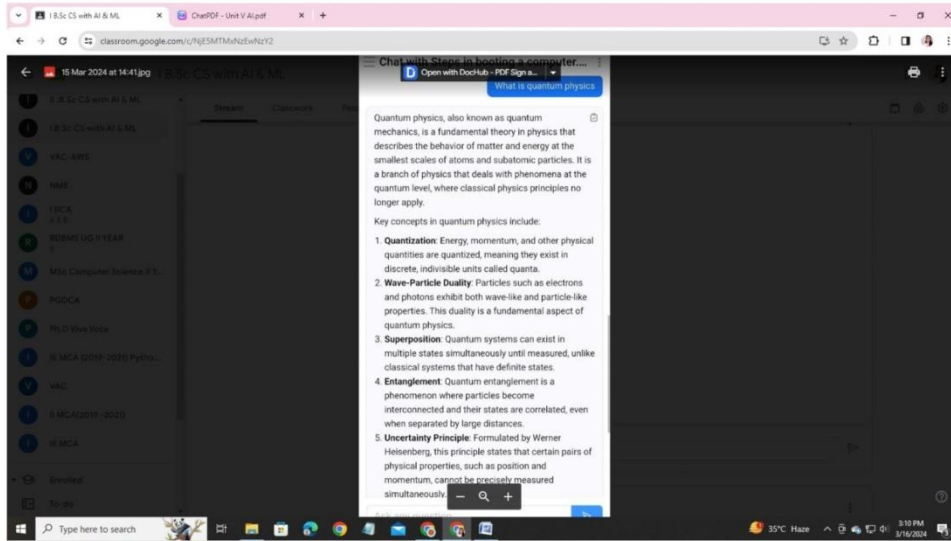


Nallamuthu Gounder Mahalingam College

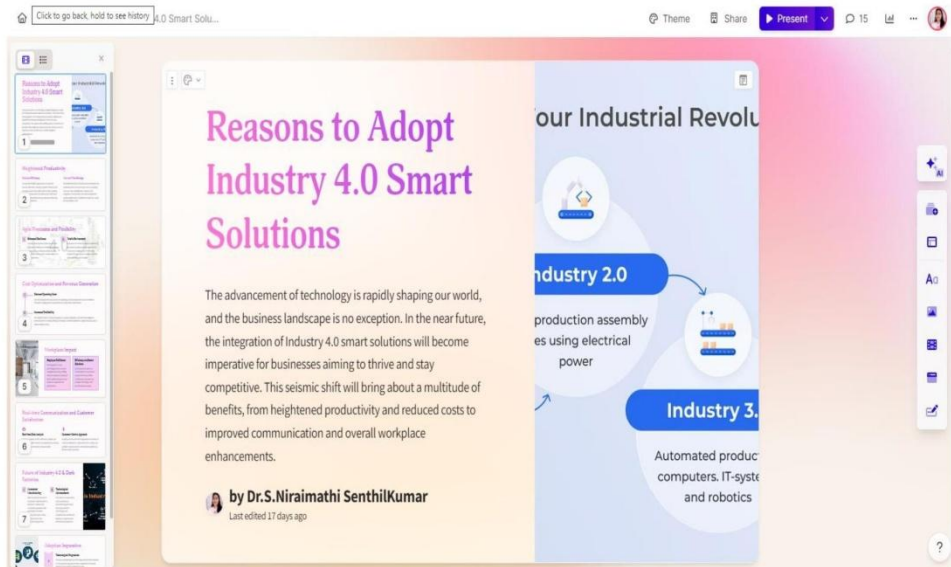
(An Autonomous Institution, Affiliated to Bharathiar University)

90,PalghatRoad,Pollachi -642001,Coimbatore, Tamil Nadu, India.

95th Rank in NIRF –2023 - Among Colleges in India.



PPT GENERATED FOR THE DOCUMENT: REASONS TO ADOPT INDUSTRY 4.0 SMART SOLUTIONS IN DR.S.NIRAIMATHI'S GAMMA .AI WORKSPACE





Nallamuthu Gounder Mahalingam College

(An Autonomous Institution, Affiliated to Bharathiar University)

90,PalghatRoad,Pollachi -642001,Coimbatore, Tamil Nadu, India.

95th Rank in NIRF –2023 - Among Colleges in India.



RESPONSES GENERATED FOR THE PPT GENERATED BY GAMMA. AI: REASONS TO ADOPT INDUSTRY 4.0 SMART SOLUTIONS IN DR.S.NIRAIMATHI'S GAMMA .AI WORKSPACE

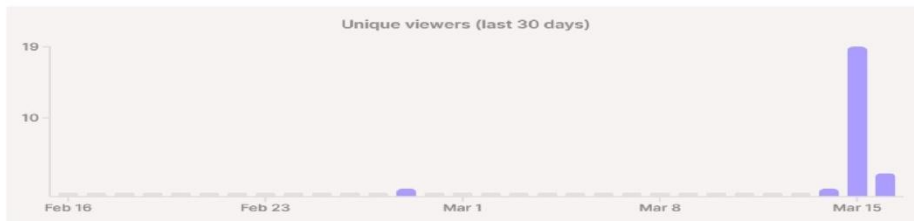
Analytics

Includes all views for Reasons to Adopt Industry 4.0 Smart Solutions since it was created on February 28th, 2024

Page views Card engagement

Page views

Everyone (20)



20 unique viewers (all time)

Last opened

Cards viewed



Dr.S.Niraimathi SenthilKumar (You)
niraisenthil@gmail.com Creator

Today at 2:41 pm

8/8



Nallamuthu Gounder Mahalingam College

(An Autonomous Institution, Affiliated to Bharathiar University)

90, Palghat Road, Pollachi - 642001, Coimbatore, Tamil Nadu, India.

95th Rank in NIRF –2023 - Among Colleges in India.



15 comments

Open ▾



Dr.S.Niraimathi SenthilKumar (You)

Say something

This week



Nishalini Nachiyar

Yesterday at 3:18 pm



What are the efficiency of data analysis



Reply



Suhitha.T

Yesterday at 3:12 pm



What is the concept of adoption imperative?



Reply



Nallamuthu Gounder Mahalingam College

(An Autonomous Institution, Affiliated to Bharathiar University)

90,PalghatRoad,Pollachi -642001,Coimbatore, Tamil Nadu, India.

95th Rank in NIRF –2023 - Among Colleges in India.



Hema Latha.P

Yesterday at 3:11 pm



What is employee fulfillment



Reply



Sivashini P

Yesterday at 3:09 pm



What is the real time data analysis?



Reply



V Sridevi 41

Yesterday at 3:03 pm



What is the concept of a dark factory in the context of Industry 4.0?





Nallamuthu Gounder Mahalingam College

(An Autonomous Institution, Affiliated to Bharathiar University)

90, Palghat Road, Pollachi - 642001, Coimbatore, Tamil Nadu, India.

95th Rank in NIRF –2023 - Among Colleges in India.



H Harini
Yesterday at 2:58 pm

Use of big data



Reply

ND Nandhine Dharshini
Yesterday at 2:58 pm

Different types of iot Devices



Reply

S S Syed saqtha
Yesterday at 2:58 pm

What are the technological advancement?





Nallamuthu Gounder Mahalingam College

(An Autonomous Institution, Affiliated to Bharathiar University)

90, Palghat Road, Pollachi - 642001, Coimbatore, Tamil Nadu, India.

95th Rank in NIRF –2023 - Among Colleges in India.




THE STAFF RESPONSE TO THE COMMENT ON THEIR RESPECTIVE WORKSPACE IN GAMMA.AI

N Nishalini Nachiyar
Yesterday at 3:18 pm

What are the efficiency of data analysis

😊

 Dr.S.Niraimathi
SenthilKumar (You)
Today at 2:53 pm

Data analysis **helps organizations optimize resource allocation.** Whether it's allocating budgets, human resources, or manufacturing capacities, data-driven insights can ensure that resources are utilized efficiently.

😊

Reply



Nallamuthu Gounder Mahalingam College

(An Autonomous Institution, Affiliated to Bharathiar University)

90, Palghat Road, Pollachi - 642001, Coimbatore, Tamil Nadu, India.

95th Rank in NIRF –2023 - Among Colleges in India.



SP Sivashini P
Yesterday at 3:09 pm

What is the real time data analysis?

😊+

Dr.S.Niraimathi SenthilKumar (You)
Today at 2:56 pm

Real-time analytics is **the discipline that applies logic and mathematics to data to provide insights for making better decisions quickly**. For some use cases, real time simply means the analytics is completed within a few seconds or minutes after the arrival of new data.

😊+

Reply



Nallamuthu Gounder Mahalingam College

(An Autonomous Institution, Affiliated to Bharathiar University)

90, Palghat Road, Pollachi - 642001, Coimbatore, Tamil Nadu, India.

95th Rank in NIRF -2023 - Among Colleges in India.



A Arthy Selvaraj
Yesterday at 3:02 pm

What is Volatile Environment?

😊+

Dr.S.Niraimathi SenthilKumar (You)
Today at 2:58 pm

Volatile environments can be characterized by **rapid changes, unpredictable outcomes, multiple stakeholders, and conflicting goals.**

😊+

Reply



Nallamuthu Gounder Mahalingam College

(An Autonomous Institution, Affiliated to Bharathiar University)

90,PalghatRoad,Pollachi -642001,Coimbatore, Tamil Nadu, India.

95th Rank in NIRF –2023 - Among Colleges in India.



Analytics



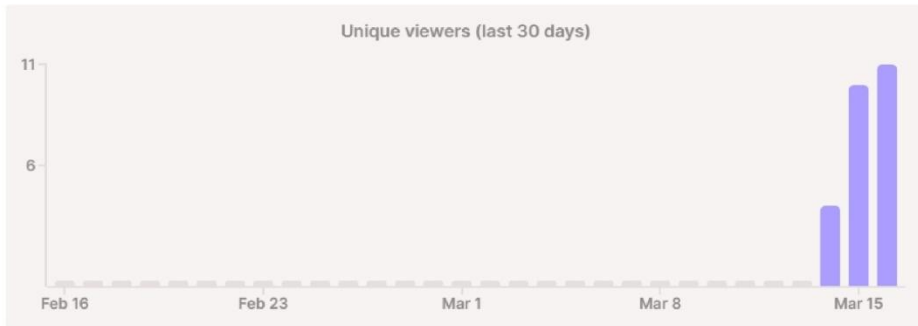
Includes all views for Unsupervised Machine Learning since it was created on March 14th, 2024

Page views

Card engagement

Page views

Everyone (22) v



22 unique viewers (all time)

Last opened

Cards viewed



Dr.S.Niraimathi SenthilKumar (You)
niraisenthil@gmail.com Creator

Today at 3:16 pm

8/8



Nallamuthu Gounder Mahalingam College

(An Autonomous Institution, Affiliated to Bharathiar University)

90, Palghat Road, Pollachi - 642001, Coimbatore, Tamil Nadu, India.

95th Rank in NIRF –2023 - Among Colleges in India.



2:12 m m • VoLTE+ 80%

www.chatpdf.com

Chat with Unit V AI.pdf

characters.

- Modeling:** The model calculates the probability of a sequence of characters based on the frequency of occurrence of specific character sequences in a given corpus. By analyzing the patterns of character sequences, the model can predict the likelihood of certain characters following a given sequence.
- Order:** The "n" in n-gram character model refers to the number of characters considered in the sequence. For example, a trigram model (n=3) looks at sequences of three characters to predict the next character.
- Vocabulary:** In contrast to word-based models, character models have a larger vocabulary since they consider individual characters. This can range from tens of thousands to millions of symbols, depending on the language and dataset.
- Out-of-Vocabulary Words:** Character models need to address out-of-vocabulary words, which are words not seen during training. This challenge is tackled by explicitly modeling unknown words with symbols like <UNK> to account for unseen character sequences.
- Applications:** N-gram character models are used in various NLP tasks such as language identification, spelling correction, genre classification, and named-entity recognition. They excel in tasks where character-level patterns are crucial for analysis and prediction.

Overall, n-gram character models play a significant role in capturing the sequential nature of characters in text data, enabling the modeling of language patterns at a granular level for diverse NLP applications.

Ask any question...



Nallamuthu Gounder Mahalingam College

(An Autonomous Institution, Affiliated to Bharathiar University)

90, Palghat Road, Pollachi - 642001, Coimbatore, Tamil Nadu, India.

95th Rank in NIRF –2023 - Among Colleges in India.



2:12 m m • VoLTE+ 80%

☆ www.chatpdf.com ↻

☰ Chat with Unit V AI.pdf ⋮

languages helps ensure effective and accurate communication in various contexts.

Describe n gram character model

An n-gram character model is a type of statistical language model that operates at the character level, where sequences of characters are used to predict the likelihood of the next character in a text. Here are some key points about n-gram character models:

1. **Definition:** An n-gram model is defined as a Markov chain of order n-1. In this context, the probability of a character c_i occurring depends only on the immediately preceding characters in the sequence, up to n-1 characters.
2. **Modeling:** The model calculates the probability of a sequence of characters based on the frequency of occurrence of specific character sequences in a given corpus. By analyzing the patterns of character sequences, the model can predict the likelihood of certain characters following a given sequence.
3. **Order:** The "n" in n-gram character model refers to the number of characters considered in the sequence. For example, a trigram model (n=3) looks at sequences of three characters to predict the next character.
4. **Vocabulary:** In contrast to word-based models, character models have a larger vocabulary since they consider individual characters. This can range from tens of thousands to millions of symbols, depending on the language and dataset.

Ask any question... ➤

< > 🏠 ☆ 📄 ☰

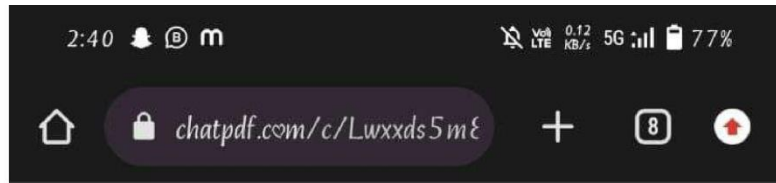


Nallamuthu Gounder Mahalingam College

(An Autonomous Institution, Affiliated to Bharathiar University)

90, Palghat Road, Pollachi - 642001, Coimbatore, Tamil Nadu, India.

95th Rank in NIRF –2023 - Among Colleges in India.



☰ Chat with Unit V AI.pdf

3. **Training and Evaluation:** Machine learning tools facilitate the training of models on labeled datasets and provide mechanisms for evaluating the performance of the models using metrics like accuracy, precision, recall, and F1 score.
4. **Hyperparameter Tuning:** Many machine learning tools support hyperparameter optimization techniques to fine-tune the model's performance. This involves searching for the best set of hyperparameters that optimize the model's performance.
5. **Deployment:** Once a model is trained and evaluated, machine learning tools often provide options for deploying the model into production environments. This may involve exporting the model to a format that can be integrated into applications or services.
6. **Visualization:** Some machine learning tools offer visualization capabilities to help users understand the data, model architecture, training process, and results. Visualizations can aid in interpreting complex models and results.
7. **Scalability and Performance:** Advanced machine learning tools are designed to handle large datasets and complex models efficiently. They may leverage distributed computing frameworks to train models faster and at scale.
8. **Interoperability:** Machine learning tools may support integration with other tools and libraries commonly used in the machine learning ecosystem, such as TensorFlow, PyTorch, scikit-learn, and others. This interoperability allows users to leverage a wide range of resources and functionalities.

Popular machine learning tools include TensorFlow, PyTorch, scikit-learn, Keras, and Apache Spark MLlib. These tools offer a rich set of features and capabilities to support the development and deployment of machine learning models across various domains and applications.

Ask any question...





Nallamuthu Gounder Mahalingam College

(An Autonomous Institution, Affiliated to Bharathiar University)

90, Palghat Road, Pollachi - 642001, Coimbatore, Tamil Nadu, India.

95th Rank in NIRF –2023 - Among Colleges in India.



2:41

chatpdf.com/c/MdnRI

Chat with Unit V AI.pdf

Natural Language Processing (NLP) is a subfield of artificial intelligence that focuses on the interaction between computers and humans using natural language. It involves the development of algorithms and models that enable computers to understand, interpret, and generate human language. NLP encompasses a wide range of tasks, including but not limited to:

1. **Speech Recognition:** Converting spoken language into text.
2. **Language Understanding:** Extracting meaning from text or speech.
3. **Language Generation:** Creating human-like text or speech.
4. **Machine Translation:** Translating text from one language to another.
5. **Information Extraction:** Identifying and extracting relevant information from text.
6. **Sentiment Analysis:** Determining the sentiment or emotion expressed in text.
7. **Named Entity Recognition:** Identifying and classifying named entities in text (e.g., names of people, organizations, locations).
8. **Question Answering:** Providing answers to questions posed in natural language.

NLP techniques often involve machine learning, deep learning, and linguistic analysis to process and

Ask any question...



Nallamuthu Gounder Mahalingam College

(An Autonomous Institution, Affiliated to Bharathiar University)

90, Palghat Road, Pollachi - 642001, Coimbatore, Tamil Nadu, India.

95th Rank in NIRF –2023 - Among Colleges in India.



The screenshot shows a web browser window with multiple tabs. The active tab is 'chatpdf.com/c/OkXcGSAMXHGN3qjSfR6x1'. The main content area displays a PDF document titled 'lecture1423726024osintro.pdf'. The PDF content includes sections on 'Managing Hardware', 'Providing an Interface', and 'Evolution of Operating Systems'. A chat window on the right side of the page contains the following text:

Hello and welcome to the helpful PDF file on Operating Systems by Assistant Professor BIGHNARAJ NAIK! This document covers a range of topics including the evolution of operating systems, process management, memory management, and file systems.

» What are the different types of operating systems discussed in the document?
 » How does the document explain the concept of process synchronization?
 » Can you provide examples of scheduling algorithms mentioned in the PDF file?

what is an operating system

An operating system (OS) is a software program that serves as an intermediary between computer hardware and software applications. It manages computer hardware resources and provides services for computer programs. The primary goals of an operating system are to execute programs, make the computer system convenient for users, and efficiently utilize computer hardware.

Furthermore, an operating system provides a stable and consistent way for applications to interact with hardware without needing to know the intricate details of the hardware. It controls and coordinates the use of hardware by users and applications, acting as the first program loaded into the computer's memory and remaining there throughout the system's operation.

In essence, an operating system manages hardware resources such as the processor, memory, and disk space, provides an interface for users to interact with the computer system, and ensures the execution of programs in a controlled and efficient manner.

types of operating systems

<https://www.chatpdf.com/c/OkXcGSAMXHGN3qjSfR6x1>

This screenshot shows the same chatpdf.com interface but at a different page of the PDF document. The chat window on the right contains the following text:

evolution of operating system

The evolution of operating systems has been significant over the years, with advancements in technology and changing user needs driving the development of more sophisticated operating systems. Here is a brief overview of the evolution of operating systems as discussed in the PDF file:

1. Batch/Early Systems: Early computers were large machines where users submitted jobs consisting of programming data and control information. The operating system managed the execution of these jobs, with users not directly interacting with the computer system.
2. Multiprogrammed Systems: Multiprogramming increased CPU utilization by organizing jobs in memory so that the CPU always had a job to execute. The operating system kept several jobs in memory simultaneously, switching between them as needed to maximize CPU efficiency.
3. Personal Computer Systems/Desktop Systems: Personal computers emerged in the 1970s as smaller and less expensive microcomputers. These systems focused on maximizing user convenience and responsiveness, with file protection becoming necessary as other users could access files on a PC. Lack of protection made it easy for malicious programs to disrupt data.
4. Modern Operating Systems: Today's operating systems, such as Windows, macOS, and Linux, have evolved to provide advanced features like multitasking, virtual memory management, graphical user interfaces, networking capabilities, and security mechanisms. These operating systems cater to a wide range of devices, from personal computers to servers and mobile devices, offering a user-friendly experience with robust system management capabilities.

Overall, the evolution of operating systems has been driven by the need for improved efficiency, usability, security, and compatibility with a diverse range of hardware and software applications.



Nallamathu Gounder Mahalingam College

(An Autonomous Institution, Affiliated to Bharathiar University)

90, Palghat Road, Pollachi - 642001, Coimbatore, Tamil Nadu, India.

95th Rank in NIRF –2023 - Among Colleges in India.



The screenshot shows a web browser window with multiple tabs. The active tab is 'chatpdf.com/c/IIUwKtyguRD4PLKwtwbIK'. The main content area displays a PDF document titled 'Steps in booting a computer.pdf'. The document is from NIELIT Gorakhpur, Course: O Level (2nd Sem), Subject: IT I, Topic: Booting Process (continued), Date: 26-03-24. It describes the booting process as switching on the computer and starting the operating system, listing steps: 1. BIOS and Setup Program, 2. The Power-On-Self-Test (POST), 3. The Operating System (OS) Loads, 4. System Configuration, 5. System Utility Loads, 6. Users Authentication. It includes a flowchart and detailed text for Step 1: BIOS and Setup Program, defining ROM, BIOS, and Setup programs.

On the right side of the browser, there is a chat interface with a greeting: 'Greetings! In this PDF file, you will learn about the booting process in a computer, specifically focusing on the six steps involved. From BIOS and Setup Program to Users Authentication, each step plays a crucial role in starting up your system smoothly.' Below the greeting are example questions: 'What is the significance of the Power-On-Self-Test (POST) in the booting process?', 'How does the BIOS and Setup Program contribute to the overall functioning of the computer during booting?', and 'Can you explain the role of System Utility Loads in the booting process and why it is important for the system configuration?'. There is an input field for asking questions.

<https://www.chatpdf.com/c/IIUwKtyguRD4PLKwtwbIK>