



Learn Beyond

**KPR Institute of Engineering and Technology**

(Autonomous, NAAC "A")

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**AM002****NBA Accredited**  
(CSE, ECE, EEE,  
MECH, CIVIL)**DATA STRUCTURES AND ITS APPLICATIONS**

<b>Event No</b>	AM002
<b>Organizing Department</b>	Artificial Intelligence and Machine Learning
<b>Associate Dept.   NSC</b>	Artificial Intelligence and Machine Learning
<b>Date</b>	19/09/2023
<b>Time</b>	09:30 AM to 11:30 AM
<b>Event Type</b>	Expert Talk
<b>Event Level</b>	Dept. Level
<b>Meeting Medium</b>	
<b>Meeting Link</b>	<a href="https://us06web.zoom.us/j/85611612757?pwd=oy9ja3Klh3BhRsydaBmkvjH4aCG1CF.1">https://us06web.zoom.us/j/85611612757?pwd=oy9ja3Klh3BhRsydaBmkvjH4aCG1CF.1</a>
<b>Total Participants</b>	68
<b>Faculty - Internal</b>	4
<b>Students - Internal</b>	62
<b>Students - External</b>	2

## Related SDG



## Resource Persons

Sl	Type	Name	Designation	Company	Email	Phone
1	Resource Person	Mr Rajendran Subramanian	CEO	Silicon Software Services	rajendran2002@gmail.com	xxxxxxxxxx

## Involved Staffs

Sl	Name	Role
1	Karthikeyan S	Convenor
2	Pandiya Rajan G	Coordinator

## Outcome

To understand basic data structures and implementation of ADT. To develop the ability to design and analyze basic algorithms. To understand the differences between time and space complexity. To implement various kinds of searching and sorting techniques.

## Event Summary

Department of Computer Science and Engineering (Artificial Intelligence and Machine Learning) organized an Industry Expert Talk on "Data Structures and its Applications" on 19th September 2023 (9:30 AM to 11:45 AM) for the students of third semester CSE (AIML). Through this session, the students understand how to create a node with the help of a structure. how to allocate memory (using malloc) with the help of C programs. the basic data structures and ADT like arrays, linked lists, stacks, queues, trees and graphs with their industrial application. the implementation of linked lists like Creating a node, Allocating memory, Traverse all the nodes one after another. Add a node at the given position, first position (head), and last position (tail). Deletion of a node. Search an element. Update a node. Sorting: To arrange nodes in a linked list in a specific order. the importance of storing data, sorting, searching, inserting, and deleting data. real-time applications of data structure concepts. Finally, Students learned how the data structure and algorithms will help them to become better programmers. Also, they will be able to write code that is more efficient and more reliable.



DEPARTMENT CSE (AIML)  
ORGANISES  
INDUSTRY EXPERT TALK  
ON

## Data Structures and its Applications

09:30 AM - 11:30 AM  
19 September 2023

[Zoom Meeting Link  
http://bit.ly/kprietaimtalk03](http://bit.ly/kprietaimtalk03)



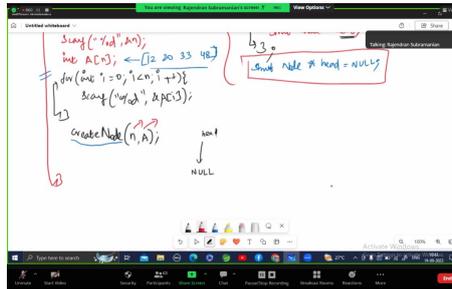
**Guest Speaker**  
**Mr. Rajendren Subramaniam**  
CEO  
Silicon Software Services

CONVENOR  
Dr. S. Karthikeyan

Coordinator  
Mr. D Pandiya Rajan  
8944754041

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Online C Compiler IDE

```

1 #include<stdio.h>
2 #include<stdlib.h>
3 struct Node
4 {
5     int data;
6     struct Node *next;
7 };
8 struct Node *head = NULL; //this is global variable
9 struct Node *tail = NULL; //this is also global variable
10 //these 2 variables are available till the program ends...
11 int count = 0; //global variable
12 void createNode(int n, int A[]){
13     printf("add %d\n", n);
14     if(head == NULL){ //this is to check node exist or not, if node at all this executes
15         head = (struct Node *)malloc(sizeof(struct Node));
16         head->data = A[i];
17         head->next = NULL;
18         tail = head;
19         count++;
20     }
21     else{//if node exist this works
22         struct Node *p = (struct Node *)malloc(sizeof(struct Node));
23         p->data = A[i];
24         p->next = NULL;
25         tail->next = p;
26         tail = p;
27         count++;
28     }
    
```

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