



**Guest Lecture on” TOC and it's application areas” by **Dr. Vivek Kulkarni**  
(Senior Engineering Manager - Enterprise Software Products at HP)**

Academic Year: **2021-2022**

Name of Event: **Guest Lecture on TOC and its application areas**

Date & Time of the Event: **17/09/2021 from 11.00 am to 1.00 pm**

Name of the Speaker: **Dr. Vivek Kulkarni**

Designation: **Senior Engineering Manager - Enterprise Software Products**

Company / Institution: **HP (Hewlett-Packard Development Company)**

Targeted Audience: **TE IT**

Venue: **Online Mode**

Coordinator: **Prof Pranali deshmukh**

Number of Participants: **49**

**Activity Description in Nutshell:**

A Guest Lecture by **Dr Vivek Kulkarni** (Senior Engineering Manager, Enterprise Software Products at HP) on topic “**TOC and it's application areas**” was organized by the Department of Information Technology on 17<sup>th</sup> September 2021 for TE students. Due to the Covid-19 pandemic, the Guest Lecture was conducted through online mode (Google meet). Dr Vivek Kulkarni in his session explored the industry applications of TOC and Yacc, lexical analysis *etc* that relates Compiler design with TOC. Dr Vivek Kulkarni has cleared all doubts/queries asked by the students. The event ended with a vote of thanks. It was a very good learning experience for students and they were able to interpret the industry application of TOC while designing compilers.

## Event Photos:

**Determinism Vs Non-Determinism**

**Deterministic State Machine**

	a	b
p	q	-
q	-	p

**Non-Deterministic State Machine**

	a	b
p	{q, r}	-
q	-	{p}

12:21 | A Guest Lecture on "TOC and it's application ar... | Activate Windows

## Determinism Vs Non-Determinism in TOC

**Finite State Machine Regular Expression** → **Regular Set**

Applications

- Lexical Analysis / Tokenization
- Text Editors
- Shell Commands
- Any simple pattern based transformations
- many other.....

12:34 | A Guest Lecture on "TOC and it's application ar... | Activate Windows

## TOC applications in industry