

**SRI VENKATESWARA COLLEGE OF ENGINEERING (SVCE)
PENNALUR, SRIPERUMBUDUR-602117**



A Reflection Report

Five Days Workshop

On

Documenting Technical Reports using LaTeX

Organized by

Department of Computer Science and Engineering

Date: June 1- June 5, 2021.

Time: 6.00 PM to 7.00 PM

Co-ordinators

Dr. N. Rajeswari, ASP/CSE, SVCE
Ms. S. Rajalakshmi, AP/CSE, SVCE
Mr. A. Sowmya Narayanan, AP/CSE, SVCE
Ms. G. R. Khanaghavalle, AP/CSE, SVCE



Prepared by,
Dr. N. Rajeswari,
ASP/CSE



Approved by,
Dr. R. Anitha,
HOD - CSE

Report on the event

Objective:

The aim of the 5 days National Level workshop is to impart knowledge in Documenting Technical Reports Using LaTeX.

About the program:

The workshop focuses on typesetting technical documents using LATEX. LATEX is a document preparation system. It is widely used document typesetting system which can produce high quality article, a report, a book, a dissertation, etc. Besides, Beamer is a Latex document class to create slides for presentation. These five days of workshop has been designed to provide a clear sense of Latex which will enable the participants to present their ideas effectively in the form of technical reports using LATEX.

Day 1:

Day 1 started by inviting Dr. S. Prabhu, Assistant Professor, Department of Applied Mathematics, Sri Venkateswara College of Engineering. The session started with the introduction of LaTeX. Then a brief difference between Tex and Latex was discussed by the speaker. He demonstrated the process of creating a simple article in LaTeX. He also described several packages that are required to work on a document. Then he explained process of creating the mathematical equations in LaTeX. List and types of list that can be used in technical documents were discussed. Then the process of handling sections and chapters in the technical documents are elaborated. He finally ended up the session by explaining the working process of Latex.

Day 2:

Day 2 is continued by Dr. S. Prabhu, Assistant Professor, Department of Applied Mathematics, Sri Venkateswara College of Engineering. He started with explaining the concepts of sections in the technical documents. He demonstrated the different ways of creating sections in LaTeX. The next concept he explained is inserting images into a technical documents. In LaTeX, the images are inserted with its original quality. It can be resized and aligned according to the user requirement. He demonstrated every possible ways by which the images can be inserted to the document. Then the process of inserting multiple images is explained by him. The tricks of getting the rare mathematical symbols using mathematical assistant is shown by him. Finally he ended up the session with the advantage of using LaTeX over Microsoft word.

Day 3:

Day 3 session started by inviting Dr. R. Jayabhaduri, Associate Professor, Department of Computer Science and Engineering, Sri Venkateswara College of Engineering. She started the session by introducing Beamer a LaTeX class used for creating presentation. Beamer is a powerful tool for creating great looking presentation. She carried on the session by explaining the process of creating table in LaTeX. Then the process of combining the rows and columns is demonstrated. Tables can also be captioned, labelled and referenced in LaTeX. She demonstrated the ways of positioning the table and colouring alternate rows of the table. A long table occupying two to three pages of a documenting is called Multipage table. The speaker narrated the ways of handling multipage table in LaTeX. The speaker also gave some tips and tricks to handle images in LaTeX. She explained the TikZ package used for creating graphics in LaTeX. TikZ package provide small macros which can be used to create different graphical figures in LaTeX. She also showed the demo of using Bar graphs and plots in the technical document. Finally the speaker ended up the session by demonstrated the process of creating flow charts in LaTeX.

Day 4:

Day 4 started by inviting R. Bhuvanewari, Assistant Professor, Department of Computer Science and Engineering, Sri Venkateswara college of Engineering. She started the session with a demo of handling csv files in LaTeX. The speaker narrated the different aspects of handling csv files in LaTeX. She also explained the process of adding header and footer to the technical document. Then she started with the packages used for algorithmic writing in LaTeX. Three packages are used in algorithmic writing that includes algorithmic, algorithm2e and Listings. She demonstrated the process of using all these three packages to write algorithms in technical documents.

Day 5:

Day 5 is continued by inviting R. Bhuvanewari, Assistant Professor, Department of Computer Science and Engineering, Sri Venkateswara college of Engineering. She started the session by explaining the process of handling bibliography in LaTeX. She narrated the way of searching bibliography from Google scholar site and also showed the demo of inserting that to the technical documents. She also explained different bibliographic styles that are existing in LaTeX.

Then the session is handed over to Dr. N. Rajeswari, Associate Professor, Department of Computer Science and Engineering, Sri Venkateswara college of Engineering. She introduced the concepts of Beamer Presentation in LaTeX. She gave valuable knowledge on the process of creating Beamer presentation which is can be used in technical meetings and in conferences. She ended up the session by

giving some tips on debugging the most common errors that appears in LaTeX. The workshop ended with feedback from the participants and Q&A Session.

Invitation and Agenda



DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

Solicit your esteemed presence for the

Inaugural Function of

National Level Workshop

On

DOCUMENTING TECHNICAL REPORTS USING LATEX

By

Dr. R. ANITHA

Professor and Head

Department of Computer Science and Engineering,
Sri Venkateswara College of Engineering,
Sriperumbudur

Venue : <https://meet.google.com/djq-qkni-dco>

Date : **1st June 2021**

Time : **06.00 PM**

Coordinators

- Dr. N. Rajeswari,ASP/CSE, SVCE
- Ms. S. Rajalakshmi,AP/CSE, SVCE
- Mr. A. Sowmya Narayanan,AP/CSE, SVCE
- Ms. G. Khanaghavalle,AP/CSE, SVCE





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Schedule:

June 1, 2021 - Document Structure - Dr. S.Prabhu, Assistant Professor/AM

- Packages, Text Formatting, Lists, Bullets and Numbering, Sectioning and Chapters

June 2, 2021- Math Mode & Algorithm - Dr. S.Prabhu, Assistant Professor/AM

- Mathematical Typeset, Alignments

June 3, 2021 - Tables & Graphics - Dr. R.Jayabhaduri, Associate Professor/CS

- Working with Images ,Tables, Tikz& Flowchart,

June 4, 2021 - Academic Documents - Ms. R.Bhuvanewari, Assistant Professor/CS

- CSV File Handling, Algorithm Writing ,Header and Footer, Journal Class ,(Elsevier,IEEE), Bibliography and Citations, Report / Thesis

June 5, 2021 – Beamer Class - Ms. G. Khanagavallee, Assistant Professor/CS

- Beamer, Debugging Errors



