A Report on

A Five days International Level Online Workshop on "Latex: Essentials and Practices"
Organized by Department of Electronics and Communication Engineering
in association with MITS – IEEE, ComSoc (Hybrid Mode)
Institutions Innovation Council
Date: 26-Feb-2024 to 01-March-2024

Report submitted by: Dr. G.Naga Jyothi, Assistant Professor, Department of ECE
Convener: Dr. S. Rajasekaran, Professor, Dept. of ECE
Coordinator: Dr. G. Naga Jyothi, Assistant Professor, Dept. of ECE & Mrs. G. Naga Swetha, Assistant Professor, Dept. of ECE
Report Received on 15.03.2024.
Total No. of Registrations: 247
Mode of Delivery: Online Mode through Microsoft Teams

About the Workshop:

Latex is widely used in academics for the communication and publication of scientific documents in many fields. It is an effective technical content preparation with a professional look. Manuscript preparation compatible to standard journals. Automatic placements of figures, graphs and tables in the manuscript. Automatic referencing of figures, graphs and tables in the manuscript. Developing references automatically and indexing them. Sharing the documents with collaborators.

Inaugural Session:

The programme started at 26-Feb-2024 at 11.00 am with a presidential address by Dr. C.Yuvraj, Principal Academics, MITS and a welcome address by Dr. S.Rajasekaran, HoD & Professor, and Department of ECE. In the welcome address, Dr. S.Rajasekaran highlighted the participant's summary from states of India and also from foreign countries.

Day 1: 26-02-2024 & Time: 11:00 am to 12:00
Resource Person: Dr. K. Thirumalesu, Assistant Professor ,School of Technology, The Apollo University, India
Topic: Over View of Latex and Introduction to Latex.
Mode of session 1: ONLINE (TEAMS)
The resource person started his session by extended his thanks to the management of MITS, Principal and ECE-HOD. He started the session on what is the use of Latex and how it will make the manuscript look professional. He also explained what tools are needed for writing the paper. He explained the installation of Miktex and Texstudio. The introduction to Latex is explained and ended the session.
Guest profile Introduction by Dr. G.Naga Jyothi, Department of ECE
Vote of Thanks by Dr. G.Naga Jyothi

Day 1: 26-02-2024 & Time: 2:00 pm to 4:00pm
Resource Person: Dr. G. Naga Jyothi, Assistant Professor, ECE, Madanapalle Institute of Technology and Science, India
Topic: Software installation and hands on session for equation: Inline , With equation number ,without equation number and arrays.
Mode of session 2: ONLINE (TEAMS)
The resource person explained the how to write the equations in line, with equation number and without equation number. How to cite the equations in the text also explained. In this she also explained the how to write arrays, matrices in the equation forms. She also explained many mathematical equations and mathematical symbols.
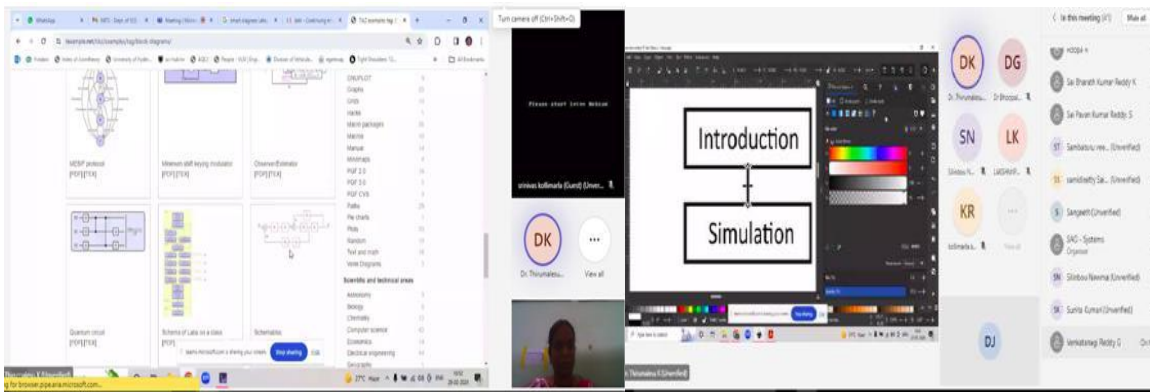
Day 2: 27-02-2024 & Time: 10:00 am to 12:00pm
Mode of session 3: ONLINE (TEAMS)
Resource Person: Dr.G.NagaJyothi, Assistant Professor, ECE, Madanapalle Institute of Technology and Science, India
Topic: Figures and Tables
The resource person explained the how to draw the figures in Microsoft vision and how to convert the .eps to .pdf form. Also explained about the .tif, .png and .jpeg forms. How to insert the figures on top and bottom pages. Aligning the figures where we want is explained. In the session how to make the tables with single page, multiple columns also explained and session was closed.
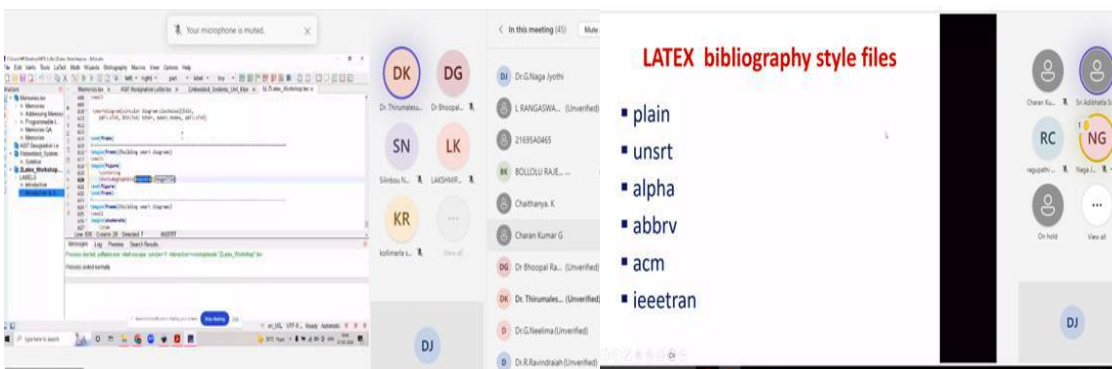
Day 2: 27-02-2024 & Time: 2:00 pm to 4:00pm
Mode of session 4: ONLINE (TEAMS)
Resource Person: Dr. K. Thirumalesu, Assistant Professor ,School of Technology, The Apollo University, India and Dr. G. Naga Jyothi, Assistant Professor, ECE, Madanapalle Institute of Technology and Science, India
Topic: Figures and Tables

The resource person explained the Inkscape tool for drawing the figures and also, he explained the Origin pro software to draw the result analysis graphs. Also, in this session he explained how to draw the electronic circuits in the Inkscape and flow chart drawing also explained. Also, he explained the origin of pro software for graphs preparation. The resource person also explained about how to write the algorithm in Latex.

Day 3: 28-02-2024 & Time: 10:00 am to 12:00pm
Mode of session 5: ONLINE (TEAMS)
Resource Person: Dr. Sriadibhatla Sridevi, Professor, SENSE, Vellore Institute of Technology, India
Topic: Bibliography
The resource person explained about how to write the references and how to cite in the journals. She explained about bib items and the other form of the references style. She explained diffent forms of styles to write the refences like APA format, MLA format and Chicago format.

Day 3: 28-02-2024 & Time: 2:00 pm to 4:00pm
Mode of session 6: ONLINE (TEAMS)
Resource Person: Dr. K. Thirumalesu, Assistant Professor, School of Technology, The Apollo University, India
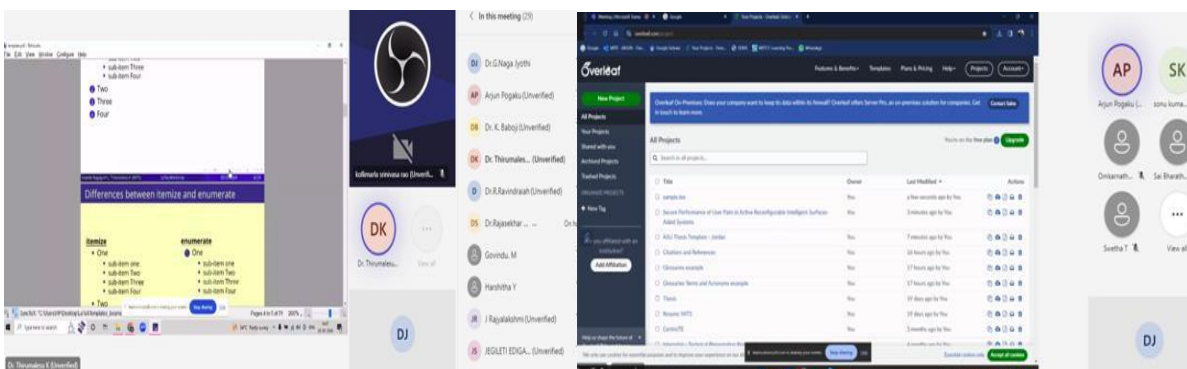The resource person explained about how to prepare the PPTs in Latex using beamers. He explained how to insert the figures, tables and equations in beamers. He also explained how to write algorithms in beamers.

Day 4: 29-02-2024 & Time: 10:00 am to 12:00am
Mode of session 7: ONLINE (TEAMS)
Resource Person: Dr.K.Thirumalesu, Assistant Professor, School of Technology, The Apollo University, India
The resource person explained about the bibliography in beamers. He also explained about what are the packages needed in the Latex and how to install the packages.
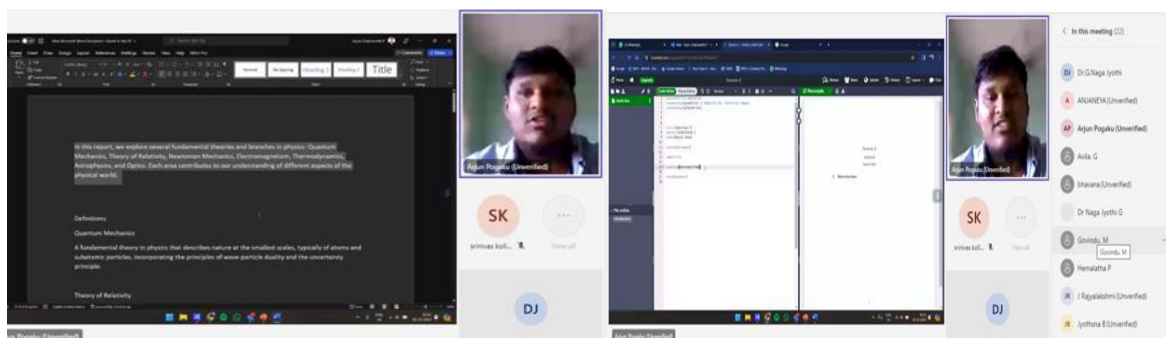
Day 4: 29-02-2024 & Time: 2:00 pm to 4:00pm
Mode of session 8: ONLINE (TEAMS)
Resource Person: Mr.P.Arjun Chakravarthi

The resource person explained about the online tool of Overleaf. He also explained about the LYX software to write the manuscript. He also explained how to draw the figures, tables and equations in Overleaf.

Day 5: 01-03-2024 & Time: 10:00 am to 12:00am
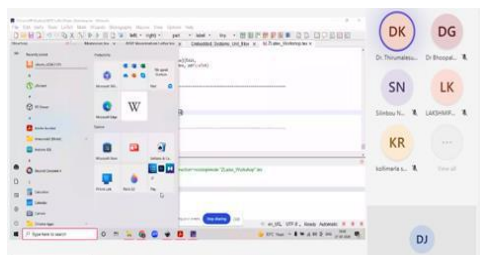**Mode of session 9: ONLINE (TEAMS)**
Resource Person: Mr. P. Arjun Chakravarthi

The resource person explained about how to write glossaries in overleaf, Latex. He explained how to write the refences in overleaf with different formats.

Day 5: 01-03-2024 & Time: 2:00 pm to 4:00pm
Mode of session 10: ONLINE (TEAMS)
Resource Person: Dr. G. Naga Jyothi

The resource person has explained how to write a thesis in Latex. Also, she explained how to write textbook. How to prepare the resume which is more helpful for the students. How to convert the IEEE template to Springer template. Springer to other forms of the templates also explained.

Finally, HOD and Coordinators concluded the session.

Outcome of workshop "Latex: Essential and Practices"

1. Enhanced Skills: Participants might have gained a better understanding of LaTeX, its essential features, and best practices in document preparation

2. Improved Efficiency: Attendees may have learned techniques to work more efficiently with Latex, such as using templates, managing references, and handling complex formatting tasks.

3. Practical Knowledge: Workshops often focus on practical applications, so participants might have acquired hands-on experience in creating documents, presentations, or reports using LaTeX.

4. Network Opportunities: Workshops provide a platform for participants to interact with experts and peers, fostering networking and collaboration opportunities.

5. Feedback and Evaluation: Organizers often gather feedback from participants to assess the effectiveness of the workshop and make improvements for future session.