Technical Paper, Presentation and Poster

NSF REU Program in Telematics and Cyber-Physical Systems
Wayne State University
Structure of a Technical Paper

• Title
• Abstract
• Introduction
• Background Material
• Description of the Proposed Work (e.g. algorithm, architecture, protocol, etc.)
• Results and Discussions
• Conclusions
• References
Title: Must be concise and to the point.

Abstract: A summary of the paper, including a brief description of the problem, the solution, and conclusions. Do not cite references in the abstract.
Introduction:

• This should contain the background of the problem, why it is important, and what others have done to solve this problem.
• All related existing work should be properly described and referenced.
• The proposed solution should be briefly described, with explanations of how it is different from, and superior to, existing solutions.
• The last paragraph should be a summary of what will be described in each subsequent section of the paper.
Background Material: Related background materials (*especially the recent work*) must be presented in detail and referenced.

Description of the Proposed Work: The proposed work (idea) must be presented in detail with detailed explanations of how it is different from, and superior to, existing solutions.
Results and Discussions: The proposed idea must be tested using appropriate techniques such as experiments, numerical analysis, simulation etc. The results must be compared with the results of the existing techniques. All results must be properly explained and discussed.
Conclusions : This summarizes what have been done and concluded based on the results. A description of future research should also be included.

References : This should contain a list of papers referred to in the paper. Use a reference which is easily available, e.g., a journal or conference proceedings paper.
Technical Presentation

Most presentations at technical conferences are about 20-minute long including Q&A.

• The first slide should contain the title of the talk, authors’ names and affiliation.

• The next slide should contain an overview of the talk so the audience can understand what’s coming.
Technical Presentation (continued)

• Then there should be a slide which explains the **motivation** behind the work.
• Next few slides should briefly cover the **background** material.
• Then the proposed work should be briefly presented.
Technical Presentation (continued)

• After that key results should be shown using charts, tables, etc. The results should also be properly explained and discussed.

• A slide by the title “Conclusions” should summarize what has been done and what has been achieved.
Technical Presentation (continued)

• There should be a slide by the title “Future Work”. This slide should contain some ideas about the extension of the proposed work.
Some Tips for Good Presentation

• Do not put too much text in slides.
• Font size should be around 32.
• Try to use as many pictures, figures and charts, as you can instead of using texts.
• There should be 1 or 2 slides for each minute of talk.
Some Tips for Good Presentation (continued)

• **Don’t read** your slides. However, from time to time you can look at your slides.

• Don’t stand at one place while talking. Try to move around while talking.

• Have some **body motion**.

• Maintain **eye contact** with the audience.
Some Tips for Good Presentation (continued)

• **Voice** should be loud enough so that people at the back row can hear.

• **Practice** your presentation several times before you go for the final presentation. Practice will help you to determine how many slides you can use for your final presentation.
Some Tips for Good Presentation (continued)

• Invite friends to attend your practice session and ask them to ask you questions.
• During Question and Answer, if you are asked a hard question and if you don’t know the answer, admit that you don’t know the answer.
Some Tips for Good Presentation (continued)

• Don’t try to pretend that you know the answer while you actually don’t know. This will increase the credibility of your talk and avoid you from getting into trouble with more hard questions.