

Engineering Diploma Seminar

Introduction

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Motivation and objective

- It's not enough to create something ...
- ... you need to tell the world about it!
- Soft skills are as important as hard skills.
- Course objective: to develop the soft skill of presenting your work and writing about it.

Two basic components

- Presentation
- Paper

Presentation: approach

- Hands-on approach.
- Practice, practice, practice!
- You prepare and present a presentation on your engineering diploma work.
- The entire class and I provide feedback
 - technical feedback
 - quality-of-presentation feedback
- Hence your presence in class is mandatory!
 - you can miss only one class in a justified case

Presentation: timing

- One person per 45-minute class.
- The presentation: 20 minutes.
 - this is the length of a typical conference presentation
 - you want to use the entire slot – no more, no less
- Technical feedback: 10 minutes.
- Quality-of-presentation feedback: 10 minutes.
- Time margin: 5 minutes.

Presentation: target audience

- When preparing to present, always think of your target audience.
 - what is their background/knowledge/expertise?
 - which things do all of them know?
 - again: all, not some
- Do not explain things that are obvious to your target audience.
- In our case: young professionals in electronics and IT.

Presentation: possible structure

- There is no one "correct" way to structure your presentation!
- Here is a reasonable one:
 - title slide (1)
 - contents slide (1)
 - background/motivation for your topic
 - problem statement/objective of your work
 - key challenges
 - key elements of your approach
 - results so far/expected results
 - most relevant related work/state of the art
 - conclusions (1)
 - Thank you! (1)

Presentation: assorted hints

- A rule of thumb: one slide, one minute.
 - a slide may take less time if it's a simple one
 - give the audience a chance to absorb ...
 - ... but do not dwell on a single slide for too long
- One slide, one idea.
- Use pictures, not words.
- Do not overload slides with details.
- Rehearse before class.
 - even one rehearsal makes a huge difference!

Presentation: grading

- The grade is based on effort you put in preparing your presentation, ...
- ... not its perfection.
- Why?
 - we learn, so it's unreasonable to expect perfection
 - we want to encourage frank, critical feedback
- Based on experience, I can easily see if you put in some effort or just spent 15 minutes.

Paper: approach

- Write a conference paper on your thesis work.
- Learn about typical length, formatting, paper structure, etc.
- Learn to write clearly.

Paper: target audience

- When writing, think of your target audience.
- In our case: specialists in the field of your thesis work.
 - not the same as for the presentation

Paper: formatting

- Use a popular template from IEEE

Paper Title* (use style: *paper title*)

Subtitle as needed (*paper subtitle*)

Authors Name/s per 1st Affiliation (*Author*)
line 1 (of *Affiliation*): dept. name of organization
line 2-name of organization, acronyms acceptable
line 3-City, Country
line 4-e-mail address if desired

Authors Name/s per 2nd Affiliation (*Author*)
line 1 (of *Affiliation*): dept. name of organization
line 2-name of organization, acronyms acceptable
line 3-City, Country
line 4-e-mail address if desired

Abstract—This electronic document is a “live” template and already defines the components of your paper [title, text, heads, etc.] in its style sheet. ***CRITICAL: Do Not Use Symbols, Special Characters, or Math in Paper Title or Abstract.** (*Abstract*)

Keywords—*component; formatting; style; styling; insert (key words)*

I. INTRODUCTION (*Heading 1*)

This template, modified in MS Word 2007 and saved as a “Word 97-2003 Document” for the PC, provides authors with

and not as an independent document. Please do not revise any of the current designations.

III. PREPARE YOUR PAPER BEFORE STYLING

Before you begin to format your paper, first write and save the content as a separate text file. Keep your text and graphic files separate until after the text has been formatted and styled. Do not use hard tabs, and limit use of hard returns to only one return at the end of a paragraph. Do not add any kind of pagination anywhere in the paper. Do not number text heads—the template will do that for you.

http://www.ieee.org/conferences_events/conferences/publishing/templates.html

Paper: recommended structure

- Title
 - Authors
 - Abstract
 - Keywords
 - Introduction (the essence of your problem/concept/solution and motivation for it)
 - Problem statement/main concept in more detail
 - Your solution (architecture, implementation, algorithms, etc.)
 - Testing, validation, performance
 - Related work (*here you show in what way your work differs*)
 - Summary and conclusions (may include future work)
 - References
- Note: the structure of papers is more or less fixed.

Paper: length

- 4 pages (IEEE template)
- It is not allowed to exceed the page limit.
 - a strict rule for conferences (although the page limit may be different for different conferences)
- On the other hand, few authors do not use the space they are allowed to use.
- You want to use the entire slot – no more, no less.
- Make it exactly four-page long.

Paper: grading

- Again, it's more about your effort, not how perfect the paper is ...
- Paper feedback session.
 - 15 minutes
 - if the grade is less than perfect, I'll explain

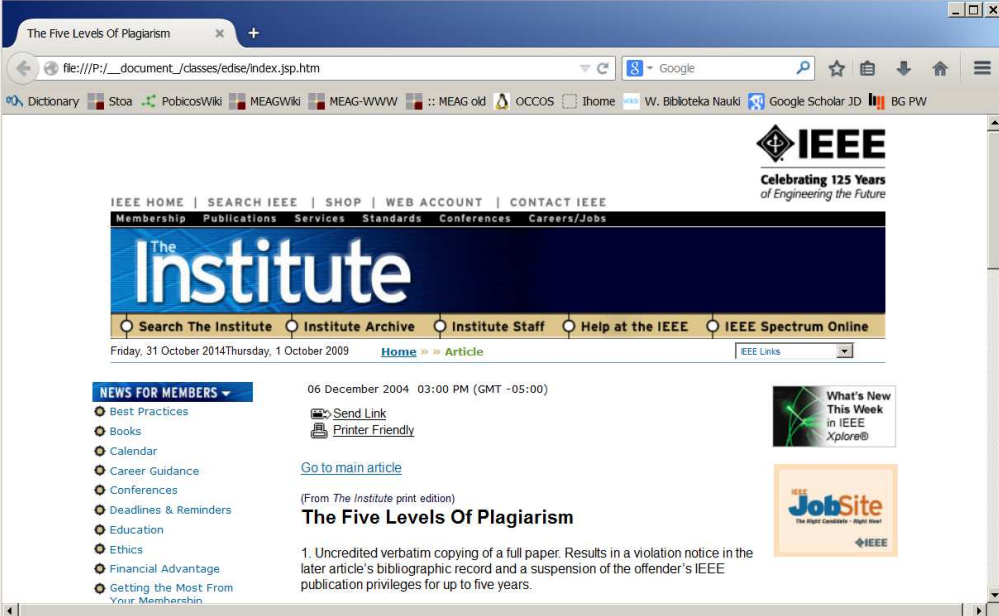
Overall grading

- Presentation: 0 – 5
- Paper: 0 – 5
- The overall grade is the mean of the two.

Plagiarism

http://www.ieee.org/documents/Level_description.pdf

- It's a serious issue!
- We may not be fully aware of what it is.
- Let's see how it is defined by IEEE, a major publisher of scientific and technical publisher.



The screenshot shows a web browser window displaying the IEEE website. The page title is "The Five Levels Of Plagiarism". The browser's address bar shows the file path: file:///P:/_document_/classes/edse/index.jsp.htm. The IEEE logo is visible in the top right corner, along with the text "Celebrating 125 Years of Engineering the Future". The main navigation bar includes links for "Membership", "Publications", "Services", "Standards", "Conferences", and "Careers/Jobs". The "The Institute" logo is prominently displayed in the center. Below the logo, there are search and navigation options: "Search The Institute", "Institute Archive", "Institute Staff", "Help at the IEEE", and "IEEE Spectrum Online". The date and time are shown as "Friday, 31 October 2014 Thursday, 1 October 2009". A "NEWS FOR MEMBERS" sidebar is on the left, listing various categories like "Best Practices", "Books", "Calendar", etc. The main content area shows the article title "The Five Levels Of Plagiarism" and a date of "06 December 2004 03:00 PM (GMT -05:00)". There are links for "Send Link", "Printer Friendly", and "Go to main article". A small "What's New This Week in IEEE Xplore" box is on the right. At the bottom, there is a "JobSite" advertisement. The article text begins with "1. Uncredited verbatim copying of a full paper. Results in a violation notice in the later article's bibliographic record and a suspension of the offender's IEEE publication privileges for up to five years."

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3. Uncredited verbatim copying of individual elements such as sentences, paragraphs, or illustrations.

Plagiarism: level 4 (source: IEEE)

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4. Uncredited improper paraphrasing of pages or paragraphs (by changing a few words or phrases or rearranging the original sentence order).

Plagiarism: level 5 (source: IEEE)

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5. Credited verbatim copying of a major portion of a paper without clear delineation of who did or wrote what.

Plagiarism

- Remember: you may reuse anything, but you have to give credit in a clear way.

Thank you!