# IEEE-Format Report Writing Workshop

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## IEEE-Format Report Writing Workshop

- Welcome!
- Purpose of this workshop

### LaTeX

- What is LaTeX?
  - Pronounced "Lay-tech"
  - A typesetting system commonly used for producing scientific and technical documents
  - Enables authors to create documents with very high typographical quality
  - Uses the TeX typesetting engine

### LaTeX and TeX

- What's the difference between LaTeX and TeX?
  - TeX is a typesetting system
    - It provides many commands which allow you to specify the format of your document with great detail (e.g. font styles, spacings, kerning, etc.)
  - LaTeX is a set of macros built on top of TeX
    - Shifts the focus from the formatting of the document to the <u>content</u> of your document

#### LaTeX

- Reasons you might want to use LaTeX:
  - Writing a large technical document
  - Very high quality output
  - Easy to type mathematical formulas
  - Portability (Windows, Unix, Mac)
  - Most technical journals/conferences have LaTeX templates
  - Simplifies formatting, numbering, referencing, etc.
- Reasons you might not want to use LaTeX:
  - Significant learning curve
- Learning LaTeX is an investment that will eventually result in time savings if you are frequently writing technical documents

## How to Start Using LaTeX with the IEEE Template

#### Windows

- 1. Go to http://miktex.org
- 2. Download MiKTeX
- 3. Run MiKTeX Installer
  - Choose to install missing packages automatically
- 4. Download IEEE template

  http://ieeeauthorcenter.ieee.org/create-your-ieee-article/use-authoring-tools-and-ieee-article-templates/ieee-article-templates/
- Open .tex file in TeXworks (included with MikTeX)
- 6. Write report and compile

## How to Start Using LaTeX with the IEEE Template

#### Mac

- Go to http://www.tug.org/mactex/
- Download MacTeX
- 3. Run MacTeX Installer
- 4. Download IEEE template

  http://ieeeauthorcenter.ieee.org/create-your-ieee-article/use-authoring-tools-and-ieee-article-templates/ieee-article-templates/
- 5. Open .tex file in TeXworks (included with MacTeX)
- 6. Write report and compile