Editorial Tips for Design Documentation

Category: **Documentation**

Nitpicker's hit list of the most commonly observed errors in Design Documents:

1. Smart quotes

If you are copying text from Googledocs or MS Word to Latex, you need to replace the "smart quotes" with two left and right single quotes ``like this.''

2. Parallel construction

When constructing a list, either formally with bullets or informally in running text, it is desirable to use parallel grammatical construction for each of the items. Here is a typical non-parallel list:

Each of the functional requirements is mapped to one or more physical systems. The main requirements are as follows:
- The system must be capable of detecting widgets less than 0.1mm across.
- Software must decide whether a widget tray is acceptable based on the widget contamination count.
- Once detected, contaminated widgets must be separated, flagged, and crushed.
- If more than four contaminated widgets appear within a three-second period, announce a "gross violation."
- Inspection criteria must be reprogrammable in the field.

Note how the sentence construction switches from "The XXX must YYY" to action phrases ("do this" or "must do this").

Solution: Rewrite some of the items so that they all have a similar construction.

3. Watch those apostrophes or, *it's not its fault*

Watch those apostrophes: The dog scratches its butt; it's gross.

4. Frankenstein et al. (2015)

Period after al., not after et. The Overleaf template does correct IEEE style citations automatically.

5. I affect you for the effect of it; it is an affectation.

6. More items, from IEEE Technical manuscript advice

Preparation of Papers for IEEE TRANSACTIONS and JOURNALS (June 2003).

- A graph within a graph is an "inset," not an "insert."
- The word "alternatively" is preferred to the word "alternately" (unless you really mean something that alternates). Use the word "whereas" instead of "while" (unless you are referring to simultaneous events).
- Do not use the word "essentially" to mean "approximately" or "effectively."
- Do not use "minimall" to mean "small"
- Do not use the word "issue" as a euphemism for "problem."
- Do not confuse "imply" and "infer."
- The abbreviation "i.e.," means "that is," and the abbreviation "e.g.," means "for example" (these abbreviations are not italicized).

7. Paper bike have axles, not triple axels.