

Current Technology or Peripheral Devices Paper

The purpose of this paper is to learn more about a particular type of hardware, and also to learn about different sources of information about hardware.

Step 1: Sign up for a current tech on my web page.

Step 2: Access Information about your Device or Technology

Go to the UWP Library web page and select “Databases” subject area “computer science”.

Select 1 paper from a news or encyclopedia source:

- News or news magazines: Computer Science Index
- News or news magazines: Academic Search Complete Database
- Encyclopedia of Science, Technology, and Ethics

Select two papers from a technical, scientific research database. You do not need to understand the full paper. If you can understand what the paper is about, and what the conclusion is, then you are successful.

- IEEE Explore database.
- ACM Digital Library.

Finally select two papers from a web site.

You will include each of these in your Reference area, and refer to them in your text.

Using References Correctly

For each section (except Conclusion) be sure to refer to references. You may include text if you put it in quotes and use a reference:

Thomas Friedman, in *Hot, Flat, and Crowded* [Fried08] describes the pollution in China as rampant:

“An American friend in Beijing tells me that every morning he gets up and does his own air quality test - as many Beijing residents do: He looks out his 24-story window and checks how far he can see. On a rare pristine day, ... he can see Fragrant Mountain rising to the northwest. On a ‘good’ pollution day, he can see the China World building 4 blocks away. On a bad day, he can’t see the building next door.”

You may also include figures, but be sure to include a reference:

Fig. 1. Trends in Energy Efficiency [Brown11]

In the Reference section, include references as follows (for a book, magazine, conference, respectively):

[Fried08] T. Friedman. *Hot, Flat, and Crowded*. Publisher-name. 2008. pages 95-106.

[YLu11] Y-H. Lu, Q. Qiu, A. R. Butt, K. W. Cameron. "End-to-End Energy Management", *Computer Magazine*, Nov. 2011, pages 75-77.

[XLu11] X. Lu, T. Lu, M. Remes, M. Viljanen. "Energy Efficiency Assessment for Data Center in Finland: Case Study", *2011 31st International Conf. on Distributed Computing Systems Workshops*, IEEE, 2011, pages 54-60.

Do not copy long sections from any source (more than a paragraph), but instead paraphrase. In paraphrasing you can summarize, or describe the gist of the section in your own words. **Any substantial cut-and-pastes from other sources and claiming the work as your own will result in a zero for the assignment.**

Step 3: Write the Paper

Paper Outline:

1. **Introduction:** What your device is and what it does. Describe the societal implications of your technology, including an example story or statistic.
2. **Vocabulary:** Provide definitions for five words that you learned that you were unfamiliar with and that are not in the course's vocabulary list. Use those words in future sections of the paper.
3. **Design:** How your device works from a *hardware* perspective, not a user perspective. You may copy a picture as long as you provide a reference for it.
4. **Variants:** Briefly describe variations from your device: what slightly different products exist? How are they are different (at a high level)?
5. **Comparison of Sources:** How did each category of information sources – technical scientific database, news/encyclopedia, web provide you with different types of information?
6. **Conclusion:** What is the take-home message you would like the reader to understand? (Please do not write that you learned a lot.) What did you find out that is worthy of mention?
7. **References:** List your references. Include *at least* the front page and the most important page that you took info from, for each reference.

Note that your Design and Variants should each be about 1 page single-spaced or 2 pages double spaced of text, while the Intro and Comparison of Sources can be half of that. Including picture(s) is good but does not replace the text requirement.

Step 4: Turn your paper in

Print a copy and put it in a binder. Turn in the binder. In addition put your paper, in MS Word or PDF form, in the D2L dropbox. Include your references in the binder or in the Drop Box too.

Step 5: Present a Summary of Your Topic

You will be grouped with others presenting in your area. You will present on two slides:

1. General overview of the technology. This is an introductory slide to the topic.
2. A description of some aspect of the hardware of this technology.

Pictures often are great in presentations, because you can talk naturally to them. It is very easy to simply read off of a slide – this will earn a lower grade value.