ECE 699 Cryptographic Engineering

Department of ECE, Volgenau School of IT&E,
George Mason University, Fairfax, VA, USA

Jens-Peter Kaps
Outline

1. Introduction

2. Obtaining Sources
Definitions

- **Bibliography Hunt**
  - Finds *some* references to *sufficiently* support a scholarly paper.
  - Perfect start to narrow down a topic.
  - Result is just a list of references.

- **Literature Search**
  - Attempts to find *all* references on a highly specific topic.
  - Result is a sorted and commented list.

- **Literature Review**
  - Analytically discusses the results of a literature search.
  - It’s an essential part of your thesis or dissertation.

More details on literature search can be found on the *Literature Search Home Page* at
http://lilt.ilstu.edu/psanders/litsearch.htm
Format of Literature Search Results

- Start with the title of your topic
- Write an introductory paragraph.
- Order and categorize the search results.
- Write short sentences about each source that help you identifying the main point of the source i.e. the reason why you list this source.
- A single sentence can reference more than one source.
- Sources should be references by name and identifier, e.g. Kaps [KY09a]
- Identifier as: First three letters of single author’s last name followed by year e.g. [Kap08] or first letter of last name of every author followed by year, and in case of multiple papers with same identifier followed by lowercase letter a, b, c, ...
A literature review as a stand-alone document consists of three sections.

- Introduction to the topic
- The actual literature review
- Observations and conclusions

Previous Work

The actual literature review is also called Previous Work and is a Chapter of your thesis / dissertation or a section of your research paper.
Below is a list of valid sources for a literature search and review in order of usefulness and credibility.

1. Books
2. Doctoral dissertation, Masters thesis
3. Peer-reviewed journal papers
4. Peer-reviewed conference papers
5. Standards, Government publications
6. Technical reports
7. Manuals
8. Magazines, Newspapers
9. Websites
Resources

- Resources for Writing Literature Searches / Reviews
  - GMU Writing Center
  - Literature Search Home Page
  - Conducting a Literature Search (PSU)
  - Literature Reviews (UNC)
  - A Few Tips On Conducting a Literature Review (U-Toronto)

- Resources for Finding Sources
  - GMU Library
  - Inspec / Engineering Village
  - IEEE Xplore
  - ACM Digital Library
  - Springer LINK
  - DBLP Computer Science Bibliography
  - Cryptology ePrint Archive by the IACR
  - GMU ECE Crypto Resources
Method

- Find a Topic
- Get a Broad Overview
  - Use first the textbook as a resource.
  - Find PhD dissertation, Masters thesis.
  - Look for survey papers.
- Narrow Down the Topic, Broaden the Search.
  - Use Inspec and find all journal and conference articles that apply.
  - Obtain copies from the publishers or the author directly.
  - Check the references of each paper.
  - Categorize the sources.
  - Group them by research group.
  - Sort them chronologically.