

CMPSC 580
Topics and Research Methods in Computer Science
Spring 2017

Assignment 2
Introduction to Research in Computer Science
Due: 26 January 2017

The goal of this assignment is to help you better understand the key characteristics of the discipline of computer science. To achieve this goal, you should read the paper “**Computing as a Discipline**”, by Peter J. Denning et. al. and write a one-page paper review.

To better grasp how to read this first paper, you should study the article “**How to Read a Paper**” by S. Keshav and learn more about the author’s three-pass approach to reading research in computer science. Then, you should examine “**Reading a Computer Science Research Paper**” by Philip W.L. Fong and learn how to write a paper review that contains sections normally called “summary”, “critique”, and “synthesis”. For the two papers mentioned in this paragraph, you should write a one paragraph *response* to each. In addition to making other relevant points, you must comment on the strengths and weaknesses of the approaches proposed by Keshav and Fong.

Although Fong describes a multiple-page review of a research paper, for this course you will always be asked to write a one-page paper review. At minimum, your review should contain one paragraph for the standard sections of summary, critique, and synthesis. As long as your review fits onto one page, you may add other points you deem to be important. Your writing for this assignment—and all other assignments in this course—should be scientific, precise, and formal.

For now, you may write the content required by this assignment using any appropriate approach to text processing and formatting. However, in future assignments, students will be responsible for writing all of their documents using the LaTeX text processing language. Students who already know how to program in LaTeX are encouraged to use it to prepare their response to this assignment. You may talk with the course instructor during office hours if you are not already familiar with LaTeX and you would like to learn how to use it to finish your work for this assignment.

Papers to Read:

- **Computing as a discipline:**
 - <http://dl.acm.org/citation.cfm?id=63239>
- **How to read a paper:**
 - <http://dl.acm.org/citation.cfm?id=1273458>
- **Reading a computer science research paper:**
 - <http://dl.acm.org/citation.cfm?id=1595493>

Deliverables to be submitted to me via your Bitbucket repository:

- One-page “**Computing as a Discipline**” paper review.
- One paragraph “**How to Read a Paper**” article response.
- One paragraph “**Reading a Computer Science Research Paper**” article response.