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CS 7123

HW1: Ch. 2 Checklist – Dr. Bylander

- 1) How do you start a research project?

I think of a general question I want to answer, and narrow down the general question into instances that can be more easily solved.

- 2) What specific tools do you use?

Weka (machine learning software package). A good statistics book. Maxima (a computer algebra system). Publicly available data sets to test algorithms and ideas.

- 3) How did you gain expertise with the various tools that you use?

Trial and error. Read the manuals and online examples.

- 4) What are some important experiences you suggest to a novice researcher?

Try many ideas and figure out why many ideas won't work. When the system administrator comes to complain about a student using too much computing resources, I know the student is being productive.

- 5) If I wanted to learn how to become a competent researcher, what specific tools would you suggest I work with?

I would recommend reading "Artificial Intelligence: A Modern Approach." If you understand most of that book, you'd have a good understanding about the general field of AI.

- 6) How do you find or choose what to research?

I'm interested in a big question of some sort, and try to find an approach to solve part of it.

- 7) How do you decide when you have enough results to publish?

Results are ready to publish when I have solid experimental or analytical results that adds to existing research. The results must have good experimental structure and analysis.