When reading an academic article, try to develop an understanding of the material beyond just the ability to summarize it. Here are some questions you should try to answer when reading an academic article.

• The contribution.
  – What problem is the author trying to solve? Is it obviously stated?
  – How is this problem important to you? To others?
  – Is the problem too broad? Too narrow?
  – Is the author qualified to provide an answer?
  – What biases might affect the author’s viewpoint?
  – What assumptions and/or restrictions are made? Are they appropriate?
  – What are the implications of these results to theory, practice and/or future research in the field?

• Technical correctness.
  – What solution is provided?
  – Does the solution solve the stated problem?
  – Is the solution complete or partial? If partial, what obstructs a complete solution?
  – How does the author justify the solution: data, logic, experience, examples?
  – What is the quality of that justification? Is it technically correct? Is it sufficient?
• Related work.
  – What alternative solutions and related work are presented?
  – What distinguishes other work from this one?
  – Is the related work relevant?
  – Is the author too focused on one discipline?
  – Are too many of the citations to the author’s own work?
  – Are there any citations missing?

• Quality of presentation.
  – Is the article well written?
  – Did the author choose an appropriate forum (journal, conference, etc)? Did the author write appropriately for the audience?
  – Is it well organized into sections?
  – Is the title appropriate?
  – Does the abstract summarize the problem and the results well?
  – Does the introduction contain the right amount of motivation and background?
  – Are acronyms, variables, new vocabulary and concepts defined before use?
  – Are figures and tables clearly presented and appropriately captioned? Are they referred to in the text? Are there figures or tables that should be added?
  – Is there unnecessary material (text, figures, tables) that should be omitted?