Week 2
Technical Reading and Writing

CSE6349
Literature Review

• Quality venues
• Focused areas/topics
  – Many articles addressing the same problem
    • Different approaches, methodologies
    • Results
  – Recognize
    • Contributions
    • Duplications
    • Flaws and errors
• Technical contributions
• Writing and presentation style
Title and keywords

• Title
  – Must reflect the main theme of the paper
  – E.g., *Structured Streams: a New Transport Abstraction*

• Keywords
  – Topics used
  – e.g., Wireless networks, Multimedia, Congestion, Feedback, Energy Conservation, Nash Equilibria
Abstract

• Abstract of the paper
  – Summary in abstract form
    • comprehensible to a general (at least a CSE) reader
• Simple and crisp
  – The language should be direct
  – Don’t use ‘I’, ‘We’, etc.
• Independent of the paper
• Content
  – Problem description
  – Existing state of the art literature that addresses the problem
  – Uniqueness and novelty of the approach used by the authors
  – Methods used
  – Results obtained
Introduction

• Elaborate on the problem addressed
  – State of the art
  – Technology
  – Research
• Motivating Scenario
  – Capture the challenges and issues
• Brief overview of related work
• Brief overview of methods used and results obtained
• Highlight contributions
• Emphasize uniqueness
• Significance of results
• Impact on applications
Conclusions

• What was the problem

• How was it addressed?
  – Methods,

• Comment on the results
  – Highlight important results and outcomes
  – Different from those by others
  – Mention problems encountered
  – Work not done and future work

• Future work
  – The work will be extended further
  – What directions

• Impact
Introduction and conclusion

• The body of the paper is packaged in ...
Remainder

• Background or Related work
• 3 -4 sections
  – Architecture, Scheme
  – Algorithm, Analysis
  – Evaluation
• Results
  – Simulation
  – Implementation
• Discussion
Background

• Typically 20% of the paper
• The author/s is aware of who is doing what in the area
  – 4 to 5 papers in detail
  – More papers may be mentioned or categorized
• The author’s background in the area of research is solid
• The author demonstrates thorough knowledge of the area of research
• Clearly demonstrates the difference between what has been done and what is presented in the current paper
  – Unique, novel, better, superior, ..... 
• Cite and refer articles
  – Liberal in praising others’ good work
Projects