# 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