Research Methods
in computer science
Spring 2024

Lecture 17

Omprakash Gnawali
March 20, 2024

Agenda

Conference updates

Paper and poster review

Idea generation

HW8

How to Review a Paper? - Considerations

Novelty

Importance

Generality

Rigor

Insights

Typical Template

Summary

Strengths

Weaknesses

Detailed Comments

Justification for these sections?

Writing review for systems conferences by Roscoe

IJCAI review selected slides by Blockeel, Davis

Poster YouTube video

Poster Review

- Largely similar to paper review in terms of existence of different components

- Differences
  - Visual design
  - Oral presentation

Paper review software

Generating Research Ideas

"Standing on the shoulders of giants"

Most ideas may not be new

New may be subjective

Adding a layer to an existing deep learning architecture

When is it new?

When is it not new?

Idea Generator Heuristics

Combination / Hybrid techniques

　　From the same discipline

　　　　(e.g., ….)

　　From a different discipline

　　　　(e.g., ….)

Address Gap/limitation (Incremental?)

　　Handle some cases that were not handled

　　Improve some (partial) aspects of dimension

Apply different datasets / settings / contexts

In-class group activity

Pick a paper

Generate at least two derivate ideas

Present: original and derivate ideas

HW8

Poster evaluation

Due at 4pm. No late submissions.