Research Methods in computer science

Spring 2023

Lecture 14

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Agenda

Conference updates
Idea generation and vetting
Adequate descriptions of systems
HW7

The Body of the paper

Depending on the area of work may describe the proposed algorithm, proofs, systems, implementations

[slide from a while ago...]

How much details?

Ideally: Enough for someone to replicate your system or idea

Practical consideration: 1-2 pages.

Illustrations

"One picture is worth a thousand words"

Architecture

Data flow

Try to have 1-2 diagrams describing your system

Code and Data Release

Becoming common in many areas of CS Important tool for reproducible research

Code and data is not adequate.

Lots of code and data but impossible to understand artifacts

How much details should we use to describe experiments?

Same consideration as describing your system.

Consequences of inadequate clarity

An experiment writeup that can be interpreted as proving humans are faster than a car

HW7

Related Work

The ten papers

Additional papers

Organizational elements