

Searching for References

- Books (can use ILL if not here)
- Articles in journals and conference proceedings in INSPEC, Compendex, ... (can use ILL if not on web or in library)
- Web pages of the main active groups (e.g., U Mass, GA Tech, INRIA, Berkeley, ACIRI, Stanford, Washington U, OSU,...): see links on class web page and U Mass web page
- Company white papers, e.g., Cisco IOS
- IETF, IRTF, various forums (ATM, ADSL, WAP, QoS, ...)
- Recent CCR, IEEE Comm Mag, JSAC, ToN, ... issues and recent SIGCOMM, INFOCOM, ICC, ... proceedings
- Simple web search
- Follow the references from each paper

Finding a Research Topic

- Conduct a literature survey
- For every paper you read, define the problem being addressed and think of alternative approaches
- Be alert to bugs/problems with the proposed scheme/protocol, possible improvements, future work sections, limitations (e.g, does not work for multicast, does not scale, ...)
- Possible starts: for previously proposed schemes: performance studies, comparisons, experimentation with parameter values, formula modifications, design modifications
- Justify all design choices

The Research Process

- ... is fun!
- Involves reading, writing, thinking, coding, experimenting, presenting (parallel activities)
- Design, implementation, evaluation: maintain records and results of changes made (CVS/rcs), data tables and graphs, figures, ..
- Build a bibliography database with short summaries of main idea, strengths and weaknesses (e.g., BibTeX)
- Maintain project web pages with papers, patches (make sure your code is run-time-configurable and neat), etc.
- Be organized! Minimize time to remember!

A Good Paper... (Partridge+)

- Properly cites (complete) and summarizes prior work: be careful with copyright issues
- Is aware of all work in various types of publications, standards, industry, and is creative
- Points limitations in their (and your own) work
- Has a well-written abstract
- Includes performance evaluation with realistic topology, traffic, parameters, heterogeneity
- Explains carefully all parameters and analyzes results (may require some stat, etc, knowledge)
- Explains applications
- Has correct spelling and grammar