Electronic Publishing in Computer Science

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The Current Situation in Computer Science

- Authors typically post papers on their home pages.
  - They are allowed to remain even after journal publication.

- Citeseer (citeseer.nj.nec.com) “harvests” the papers and makes them available.
  - most computer scientists try to find papers first by checking Google and/or citeseer

- There are also public repositories
  - CoRR hangs off Ginsparg’s arxiv.
  - Not that successful (because of citeseer?)

- There exist successful free online journals

- There is a huge disparity in price between society journals and Elsevier/Kluwer journals
  - 18 cents/page vs. 90 cents/page
  - no correlation between price and quality
  - by and large, authors do not consider price when submitting papers
Issues

The goal of having free online repositories containing a large fraction of papers (at least preprints) seems to be almost a reality in CS.

BUT . . .

• We need to distinguish “publication” in the sense of making public (e.g., posting on a repository) from certification:
  
  – this is what editorial boards/referees do.

There could be other ways of certifying quality:

• Senior person says that the paper is important.
• The paper has lots of citations.
• The paper has lots of downloads

Big concern:

• What will happen to the traditional certification system if papers are freely available online?
  
  – Setting up reputable review boards is not free.
Getting There From Here

All publishers are very concerned about the future. Current strategy:

• Put together large digital libraries that university libraries will have to subscribe to.

Holy grail: make content free but find some value-added services that people are willing to pay for.

• What are they?
• Do they even exist?

It is possible to imagine other models:

• Pay for review (essentially page charges)
• Universities support the review process
• …

But even assuming these are economically viable, how do we get there from here.

• Raise author awareness.
• Make departments pay for the journals they use.
• Switch support to cheaper journals

We’re trying to move from one Nash equilibrium to another; it’s not easy.