

Publishing Research

Overview

- We will discuss different types of publication venues
 - workshop, conference, symposium, journal, book
- Peer-review process
- Assessing publication quality
 - Bibliometrics, journal/conference impact, author impact

Journals

“An academic or scholarly journal is a peer-reviewed or refereed periodical in which scholarship relating to a particular academic discipline is published. Academic journals serve as forums for the introduction and presentation for scrutiny of new research, and the critique of existing research.” [1]

[1] https://en.wikipedia.org/wiki/Academic_journal

Journals

- Articles in journals can be **unsolicited** or **solicited**
 - Most journals have an open call for papers
 - Sometimes **special issues** of a journal can focus on a specific topic
 - It is not uncommon for a conference to have an associated special journal issue and for authors of the best conference papers to be invited to submit a journal version of their paper.
 - A journal “version” must have a significant amount of new works and can not be the same as the already published conference paper

Journal Organization

- Editor(s)
- Editorial Board
- Guest Editor – for special issues
- Reviewers
- Authors

Journals by Publisher

- ACM Journals - <http://dl.acm.org/pubs.cfm>
- IEEE Computer Society Journals - <http://www.computer.org/web/publications/transactions/>
- Elsevier Journals - <http://www.elsevier.com/journals/subjects/computer-science>
- Wiley Journals - <http://ca.wiley.com/WileyCDA/Section/id-350325.html>

Conferences, Symposiums & Workshops

- *“The ACM considers that the term **“conference”** generally implies a technical meeting in which expected attendance will exceed 300 attendees; the term **“symposium”**, 100-300, and **“workshop”**, fewer than 100. Conferences and symposia usually publish proceedings.”* [2]
- It is common for workshops to also have a proceedings but the quality and type of papers may differ

[2] http://www.acm.org/sigs/volunteer_resources/conference_manual/1-2-1guide

Conferences

- Conference (and symposium) publications are sometimes preferred in Computer Science because of the **quick turn around time** for peer review and notification of acceptance – in comparison to Journals
- Conference papers are often similar in substance to journal papers but can be shorter in length (e.g., 10 vs 20 pages)

Conferences

- Conferences may include different **tracks** divided by topic or type of publication
 - By topic: e.g., SAC 2016 - <http://www.acm.org/conferences/sac/sac2016/tracks.html>
 - By type: e.g., **research track**, **industry track**, **education track**, **emerging ideas track**
- In general there are a wide range of publication types ranging from full papers to extended abstracts.

Conference Organization

- Steering Committee
- Organizing Committee
 - General Chair
 - Program chair(s)
 - Workshop chair(s), track chair(s)
 - Proceedings chair, publicity chair, finance chair, and more...
- Program Committee
- Authors/Presenters
- Participants

Workshops

- Workshops are often **co-located** with/or **satellite** events of a larger conference or symposium
- Some workshops can be as competitive/high quality as some conferences and feature **mature, well-developed** research while others may feature **work-in-progress** and **position** papers
- If a workshop includes a publication of papers then it will be peer-reviewed

Workshop Organization

- Steering committee (often ad-hoc)
- Program chair/Workshop organizer
- Program Committee
- Authors/Presenters
- Participants

Peer Review

- *“Work published in a reputable journal or conference is peer-reviewed.” [3]*
- *“...active researchers should expect to referee about two to three times as many papers as they submit (or somewhat less if their papers are usually co-authored) and only decline to referee a paper with good reason.” [3]*

[3] Justin Zobel, Writing for Computer Science, 3rd Edition, 2014.

Blind vs. Double-Blind Reviews

- Reviews are typically **blind** – the authors do not know the identity of the reviewers
- Reviews can also be **double-blind** – the reviewers also do not know the identity of the authors. In this case names and identifying information (e.g., self citations) are removed before review
- The type of review used will depend on the policy of the journal, conference or workshop.

Journal Peer Review

- The editor or guest editor will select 3 or more research experts to review each submitted paper
 - A reviewer may also obtain the help of a sub-reviewer (colleague, graduate student) to assist in the review
- A reviewer provides a detailed critique and recommends one of the following actions be taken: **reject**, **major revisions**, **minor revisions**, **accept**
- The detail review includes author notes (advice/critique for the authors) and can include editor-only notes (e.g., in the case of suspected plagiarism)

Conference Peer Review

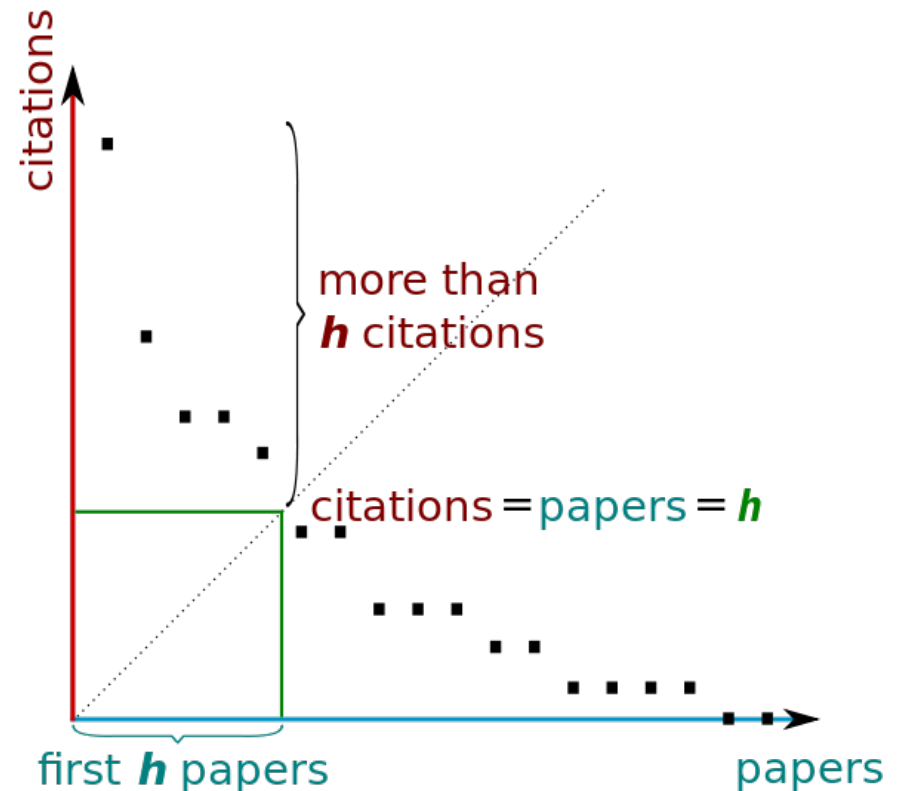
- The program chairs invite researchers to serve on the program committee (PC)
- After submissions the PC members bid on the papers and identify any conflicts of interest
- The chairs assign papers for review (subreviewing may occur).
 - Reviewer will provide a recommendation with their review (e.g., **strong accept**, **weak accept**, **neutral**, **weak reject**, **strong reject**)
- After reviews are complete the PC and the chairs discuss and reach a recommendation of accept or reject for all papers

Publication Quality

- Bibliometrics
 - Assessment of publication **quality/impact**
 - Citation metrics
 - Journal/conference metrics
 - **IF** – **impact factor**
 - Defined as the average number of citations per article
 - **H-index**
 - Described on next slide

Publication Quality

- Bibliometrics
 - Author-level metrics – assessment of researcher quality/impact
 - H-index
 - An H-index of 12 means 12 papers cited by at least 12 other papers



Source: <https://en.m.wikipedia.org/wiki/H-index>

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Summary

- Today we discussed different types of **publication venues**, the **peer-review process** and **bibliometrics**.

Things to consider...

- What are the journals and conferences available for publication in your area?
- What is the IF (impact factor) of the journals?
- What is the acceptance rate of the conferences?