

# Scientific publications

André Zúquete



## Publication types

- ▷ Poster
  - ♦ Extended abstract
- ▷ Oral communication
  - ♦ Short / long paper
- ▷ Journal article
  - ♦ Journal (target: the authors' community)
  - ♦ Magazine (target : general public)
- ▷ Demonstration
  - ♦ More common in tech-oriented forums



## Length of publications

- ▷ Extra long (> 20 pages)
  - ♦ Journals
- ▷ Long (6-8 to 20 pages)
  - ♦ Journals
  - ♦ Some conferences
- ▷ Short (4-6 pages)
  - ♦ Some journals (letters)
  - ♦ Some conferences
  - ♦ Mostly workshops
- ▷ Extra short
  - ♦ Usually named extended abstracts
  - ♦ Conferences and workshops



## Publication costs

- ▷ Conference (or symposiums) / workshops
  - ♦ Per publication fees
  - ♦ Discounts for students and organizations
  - ♦ Discounts for multiple presentations
- ▷ Journals
  - ♦ Buyers
  - ♦ Authors (Open Access)



## Publication styles: Conferences and workshops

- ▷ Usually provide a template and a page limit
  - ♦ LaTeX is common in informatics
    - But some also use Word
  - ♦ For posters some provide a maximum poster area
    - A0, A1, etc.
    - Strict formats are not common
- ▷ Articles of an event are published as its proceedings
  - ♦ One or more paper-based volumes
  - ♦ Nowadays some use USB sticks, some allow public Internet downloads



## Publication styles: journals

- ▷ Journals
  - ♦ Usually provide a template
  - ♦ Strict page limits are not common
  - ♦ Articles are packed in sets
    - Usually referred by a **volume** and **number**
    - A **volume** usually refers to a set of **numbers** for a period of time (e.g. year)
- ▷ Magazines
  - ♦ Usually provide a word limit
  - ♦ They do the final artwork over text with a minimum of formatting
    - Authors have to review the final edits for detecting errors introduced



## Periodicity

- ▷ Conferences / workshops
  - ♦ Usually, annual
  - ♦ Some biennial
    - e.g. Symposium on Operating Systems Principles (SOSP)
- ▷ Journals
  - ♦ Usually, have many issues per year
  - ♦ Special issues
    - Sporadic publication with a particular focus



## Conference / workshop Call for Papers (CfP)

- ▷ A document that describes everything about it
  - ♦ Except the papers that will be presented
- ▷ **Where** (country, state, city, building)
- ▷ **When** (first & last days, submission deadline, decision date)
- ▷ **Who**
  - ♦ Chair, Program Chair, Program Committee, Conference Chair, etc.
  - ♦ Keynotes
- ▷ **What** (topics of interest, publication types, page limits)



## Dissemination of Calls for Papers

- ▷ E-mail
  - ♦ Still used
- ▷ Web pages
  - ♦ With less information for journals
    - e.g. the possible reviewers
  - ♦ With extra information for conferences
    - Photos, links to previous editions, etc.
- ▷ Specialized pages
  - ♦ e.g. [wikicfp](#)

## Venues

- ▷ Usually change in every event
  - ♦ To give the opportunity of people around the world to participate in its organization
- ▷ Some are always on a specific location
  - ♦ Tradition
  - ♦ e.g. Symposium on Security and Privacy, Oakland, CA, USA

## Kinds of publications

- ▷ Original contribution
  - ♦ Workshop / conference / journal / magazine
- ▷ Survey or review
  - ♦ Journal
- ▷ Book chapter
  - ♦ Chapter of a book of selected publications
  - ♦ Usually by invitation



## Revision process: 1<sup>st</sup> step

- ▷ Submitted papers are evaluated by specialists
  - ♦ Members of the Conference / Workshop Program Committee (PC)
  - ♦ Pool of reviewers known by the editors of a journal / magazine
- ▷ Sets of evaluations are used to get a verdict
  - ♦ Accept / downgrade / reject
  - ♦ Verdicts come with comments and improvement suggestions
  - ♦ In case of acceptance improvements may be supervised
    - Shepherding



## Revision process: 2<sup>st</sup> step

### ▷ Accepted / downgraded on a conference / workshop

- The paper should be reviewed tacking comments into consideration
- Sometimes completely new contents are requested
- The reviewed version will go to the proceedings

### ▷ Accepted on a journal / magazine

- Usually, a conditional accept
  - Change requests are normal
- Minor changes / major changes
  - Major changes usually require a new complete revision round
  - Minor changes are usually checked by the editor in charge
- Rejections usually are definitive



## Rebuttal

### ▷ Only in some conferences / workshops

- An official way to protest unacceptable reviews
  - Incompetent, wrong, malicious, etc.

### ▷ Unofficial rebuttal is also possible

- Addressing the Program Committee Chair
- Usually has no consequences ...



## Anonymity in revisions

### ▷ Blind

- ♦ Authors do not know the identity of reviewers
- ♦ Normal case

### ▷ Double blind

- ♦ Reviewers do not know the identity of authors
- ♦ In some cases, you may not know all the author names, but you know the origin
  - Project, team, country, etc.



## Conflicts of interests

### ▷ Reviewers must avoid papers whenever their opinion may be biased

- ♦ When they have some personal relationship with the authors
- ♦ When the paper comes from their organization
  - Or a rival
- ♦ When the paper is from a team in the same project
  - Or concurrent





## Acceptance rate

- ▷ Usually, the best papers are accepted until reaching a quota
  - ♦ The number of presentation slots in a conference
  - ♦ The number of papers or pages per journal issue
- ▷ Quality indicator for conference / workshops
  - ♦  $AR < 5\% \rightarrow$  game of chance
  - ♦  $5\% < AR < 15\% \rightarrow$  excellent
  - ♦  $15\% < AR < 30\% \rightarrow$  good
  - ♦  $30\% < AR < 45\% \rightarrow$  fair

## Impact factor (IF or JIF)

- ▷ Scientometric index
  - ♦ Calculated by Clarivate
  - ♦ Reflects the yearly mean number of citations of articles published in the last two years in a given journal
$$IF = \frac{Citations_y}{Publications_{y-1} + Publications_{y-2}}$$
  - ♦ Only for journals indexed by Clarivate's Web of Science
- ▷ Used as a quality indicator
  - ♦ Assumed correlation between citations and quality
  - ♦ Quarters Q1 (best), Q2, Q3 and Q4 (worse)

## CORE rankings for conferences

- ▷ Assessment of major conferences in the computing disciplines
  - ♦ Managed by the CORE Executive Committee
  - ♦ Periodic rounds for submission of requests for addition or re-ranking of conferences
  - ♦ <https://www.core.edu.au/conference-portal>
- ▷ Conferences' categories:
  - ♦ Quality: A\*, A, B, C, Unrated
  - ♦ Audience: Australasian, National, Regional

## CORE rankings for conferences

- ▷ Conferences' quality categories:
  - ♦ A\* - flagship conference, a leading venue in a discipline area
  - ♦ A - excellent conference, and highly respected in a discipline area
  - ♦ B - good to very good conference, and well regarded in a discipline area
  - ♦ C - Ranked conference that meet minimum standards
  - ♦ Unranked - A conference for which no ranking decision has been made
- ▷ Determined by a mix of indicators
  - ♦ Citation rates
  - ♦ Paper submission and acceptance rates
  - ♦ Visibility and research track record of the key people hosting the conference and managing its technical program

## Predatory publishing

- ▷ Journal that accept anything for money
  - ♦ Quality is usually assured by reviewers
  - ♦ In this cases reviews are absent or ineffective
- ▷ John Bohannon's experiment (2013)
  - ♦ Submitted a deeply flawed medical paper to 304 journals
  - ♦ About 60% accepted in (including several reputed editors)
  - ♦ "Who's Afraid of Peer Review?" describes it

## Predatory publishing: Beall's criteria

- ▷ 26 criteria related to poor journal standards and practices
  - ♦ 9 related to journal editors and staff members
  - ♦ 7 related to ethics and integrity
  - ♦ 6 related to the publisher's business practices
  - ♦ 6 'other' general criteria related to publishers
- ▷ 26 additional practices that were 'reflective of poor journal standards'
  - ♦ But not necessarily indicative of predatory behaviour.

## Predatory publishing: Eriksson and Helgesson's criteria

### ▷ 25 signs of predatory publishing

- ♦ A journal will not necessarily be predatory if they meet one of the criteria
- ♦ But the more points on the list that apply to the journal at hand, the more skeptical one should be