Publishing in Computer Science

1. Technical report (repeat until satisfied)
2. Conference submission (repeat until successful)
3. Journal submission (repeat until successful)

Throughout the entire process:

- use svn for shared authoring and versioning control
  (use consistent naming scheme for files !!!)
  [svn add, checkout, update, commit]
- keep title and authors
  (but sometimes new authors need to be added)
Technical Report

1. Time stamp
2. Distribute to get feedback from friends and competitors
3. Backup to conference submission: data and proofs

[CoRR and/or institute repository]
Authorship

1. Decide on authorship based on contribution
   if the paper would exist in an essentially similar form
   without the contribution, then acknowledge the contributor,
   otherwise offer coauthorship

2. Alphabetic order of authors is a blessing
   - makes no statement about relative contributions
   - avoids difficult situations
   - on average, you will gain more than you will lose
   - keeps all coauthors motivated and involved
   - results in the best possible paper
TeX (LaTeX/bibtex)

• Keep the source readable:
  - don’t use commentary (%) for versioning
  - start each sentence in a new line, each paragraph after a line break
  - give syntactically or semantically meaningful names to macros

• Use macros consistently:
  - introduce a macro if and only if (1) you may change its image or (2) to improve the readability of the source
  - once you have introduced a macro, make sure it is used always

• Keep nonstandard fonts and style files to a minimum

• Keep everything in one file, with the possible exception of figures (use TeX generating tools or encapsulated ps)
Conference Submission

1. Choose the most selective conference where your submission stands a chance
2. Wait until you have the results for a stronger, more complete paper, instead of publishing a series of incremental papers
3. Accept additional authors if they strengthen the paper

Papers at top conferences are by far the most important items in your CV!
Top Conferences

1. Depends on the area; most areas have two, e.g.:
   - Theory: STOC, FOCS
   - Programming
   - languages: PLDI, POPL
   - Software
   - systems: OSDI, SOSP

2. Check Microsoft Academic Search for conference rankings

3. Acceptance rate is not necessarily a good criterion
1. Submit title, (authors), and abstract:
   - this information is used to assign reviewers
   - each PC member reviews 10-40 submissions
   - each submission is assigned 3-4 reviewers

2. Submit paper:
   - adhere to the requested format
   - clearly state the contributions
   - make sure the paper can be “scanned”
     (intro, section headers, theorems, figures, conclusion)
   - refer to tech report/web for supplemental material
     (data, proofs, prototypes)
3. Respond to reviewers ("rebuttal"):
   - be polite and grateful
   - answer questions and stay factual
   - do not add new material

4. Prepare proceedings version ("camera ready"):  
   - incorporate reviewers’ suggestions
   - if assigned a "shepherd," have him/her agree to planned revisions beforehand
   - add new material when appropriate
   - tone down strong claims
   - use proof readers
   - keep right to publish in the institute repository/web
1. PC chair assigns papers to PC members
2. PC members may choose “subreferees”
3. PC members submit reviews and numerical recommendations
4. Authors may be given the opportunity to respond to reviews
5. Extra reviews may be solicited for controversial papers
6. Papers are ranked
7. Papers are accepted from the top and rejected from the bottom
8. Middle papers are discussed at the PC meeting (balance-of-program issues may play a role)
9. Final decisions are made by the PC chair or, sometimes, by vote
10. Authors receive decision and reviews, often without justification
- disclose potential conflicts of interests
- start each review with a short, personal summary of the paper and end with a short, well-reasoned verbal recommendation
- use “Comments to the authors” to (1) suggest improvements and (2) ask concrete questions if there is a rebuttal phase
- use “Comments to the PC” only for good reason
- accompany numerical recommendations with confidence levels
- be prepared to defend each line in a subreferee’s report
- take a stand (“Accept” or “Reject”); avoid “Borderline”
- participate in the PC meeting
Every single word that I publish I write at least six times. (Halmos)

With each rewrite I try to make what I have written tighter, stronger, and more precise, eliminating every element that is not doing useful work. Then I go over it once more, reading it aloud, and I am always amazed at how much clutter can still be cut. (Zinser)
Proofreading / Copyediting

- Use standard correction symbols

- Prepare a style sheet of all items that may be treated in more than one way

- Search for errors, inaccuracies, generalities, undefined terms, inconsistencies, ambiguities, and redundancies

- For each reference, have the cited work in front of you

- Make several passes, each time looking at a limited class of issues

- Check galley proofs against original, word by word, back to front

- Check final version for line and page breaks

- Check final version for completeness of acknowledgments (be specific with each ack!), including grants
Journal Submission

1. Choose journal and, if possible, an associate editor

2. Journal submissions, unlike conference submissions, must be complete (full proofs, detailed description of examples and experiments and prototypes)

3. Journal submissions must contain substantial unpublished material (at least 33%), but don’t rewrite text only for the sake of resubmitting

4. Some fields don’t value journal papers, some don’t distinguish them from conference papers
Journal Reviewing

- Reviewing a conference paper should take 2-4 hours for an experienced reviewer; reviewing a journal paper can take days if there are proofs to be checked.

- Assuming you write 2-4 journal papers a year, each requiring 3 reviews, you can expect to referee about one journal paper per 1-2 months.
The author bears responsibility for correctness and presentation.

The editor bears responsibility for accepting or rejecting.

The referee’s task is advisory to both.
Referee should disclose:
- any relationship to the author(s)
- any relationship to the problem
- level of expertise
- any consultations
- level of effort
- what is fact and what is opinion
Referee should comment on:

- correctness
- significance
- originality
- succinctness
- accessibility
- elegance
Referee should strive for:

- objectivity
- fairness
- speed
- confidentiality
- specificity
- courtesy (anonymity test)
Referee report:

1. Brief synopsis of the paper and its significance.
2. Constructive criticism of the results and presentation.
3. Questions to the author(s).
4. List of suggested improvements.
5. List of typographical errors.
6. Overall recommendation.
7. Clearly marked private comments to the editor.
Taxonomy of unacceptable papers:

- The subject is out of scope.
- The results are published elsewhere.
- The results are at the level of a course exercise.
- The results are of minor significance.
- The paper contains major errors.
- The paper requires must be completely rewritten.
Taxonomy of acceptable papers:

1. The paper is acceptable but requires changes or additions.
   - these papers require most time for the referee
   - distinguish between conditions for acceptance and mere suggestions for improvements
   - authors’ response and revision should address both kinds of issues
   - authors should be grateful for any comments that enhance readability
     (these are voluntarily provided by the referee)

2. The paper is perfect.
   This rarely happens.
Editorship

Associate editor

- may reject a paper without review or chooses referees
  [use dblp]
- makes decisions in case of disagreeing referees
- arbitrates disputes between authors and referees

Editor-in-chief

- sets
  policies
  - chooses associate editors
  - may assign papers to
  associate editors
  - arbitrates disputes between authors and associate editors
Reviewing

- Always take reviews serious but never take them personal

- Many papers that got awards have a history of getting rejected repeatedly (reviewers tend to favor incremental results)

- As long as you believe in your work, concentrate on presenting it better and better