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
Conference Submission 1

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)

Conference Submission 2

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 proofreaders
   -keep right to publish in the institute repository/web

Conference Reviewing 1

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

Conference Reviewing 2

- 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

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.

Ian Parberry: A Guide for New Referees

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.
Ian Parberry: A Guide for New Referees

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 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 reviewers

How To Have a Bad Career in Research

1. Minimize numbers and flavors of courses
2. Maximize numbers and grades of courses
3. Read everything that may be relevant to your research
4. Read nothing that may be irrelevant to your research
5. Don't talk to students and professors working on different problems
6. Don't talk to others working on the same problem
7. Work only on straightforward problems
8. Work never on straightforward problems
9. Work on problems many others think about
10. Work on problems nobody cares about
11. Always think about finishing your thesis
12. Never think about finishing your thesis
13. Don't waste time by going to talks and conferences
14. Don't waste time on polishing papers and talks
15. Don't organize your day, month, and semester
16. Only work the number of hours you are paid
17. Always be very critical with yourself
18. Never be very critical with yourself
19. Always stick to your plan
20. Don't trust your advisor and committee
21. Always wait for and rely on your advisor
22. Don't have fun
23. Don't ask questions
24. Avoid and ignore criticism

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