

TIPS FOR WRITERS



Submitting an article for publication should not feel like playing 20 questions. Does the editor like long or short articles? How much background information is best? Should the article include reams of data? Are personal experiences better than company experiences? What is the best way to summarize years of experience?

On the other end of publishing, article reviewers shouldn't feel like they are riding a merry-go-round—up and down, round and round—and never getting to the point of an article. Everyone can avoid this vicious cycle by following a few simple technical writing tips. The ideas presented below are adapted from “How to Write a Good Technical Article” by Steve McConnell, editor-in-chief of *IEEE Software*, and will help authors get information published in its best format.

Know Your Audience

CROSSTALK is a practitioners' journal whose audience seeks hands-on experience and lessons learned articles primarily for the defense software engineering industry, and to learn about new software engineering technologies. Most of our readers build software to improve the reliability, maintainability, and responsiveness of the nation's military. They also need to know about up-to-date DoD policy decisions.

Do not overestimate or underestimate your audience. CROSSTALK readers are at all levels of software experience, from beginners to experienced professionals. It's OK to address a specific level of experience, just don't exclude others completely.

Remain Focused

Present one clearly focused idea in your article. Do not begin with unnecessary and lengthy background material. State the main summary of background material, then provide references for readers to get any detail they may desire. Do not circle around all the perimeter angles that touch your idea. Remain clearly focused. Remember, you set out to present a certain idea to the reader. There are many angles you can use to present your idea in your article, such as:

- Your experiences with a single project (or multiple projects).
- Your company's experiences.
- Your experiences with a new tool, practice, or methodology.
- New ways of using old practices, solo or in combination.
- Statistically significant research findings.

State Your Purpose

Get to the point of your article as soon as possible. State your purpose for writing the article, then explain and support your point. Don't tell readers 10 different ways to come to your conclusion and then expect them to connect the dots. Use lessons learned, hands-on experience, and personal observations to support your point, then show readers how you drew your conclusions. And note that a short paper can be just as effective as a long one.

Relate Your Experiences

You can cite endless lists of tips and rules for producing successful software engineering projects, but only your real, hands-on experience in applying these methods will get your audience to read your entire article. Most importantly, describe your struggles and how you overcame obstacles and setbacks. There is not much insight in outlining how you did things correctly. Tell readers *exactly* how you achieved your results and what measures you took to succeed. Don't simply list years of accolades, provide endless formulas and computations, or reiterate models and processes. You can refer readers to references to read about these things themselves. Tell readers what you learned and how you learned it.

Include Data

Support your idea with data. Don't speculate and don't over-generalize. Just because you say that something is so will not convince your audience that it is true. This includes adding supporting data for all claims, from the simple ones to those that are more complex to the conclusions. When you make a claim, this is the best time to put the complete details and supporting data in referenced material, tables, charts, or graphs. Lastly, do not be intimidated by the thought that your writing or grammar skills are rusty. CROSSTALK editors can make your article a publication quality piece—it's their job.

Hazard Traps

Avoid these writing traps at all cost. They have contributed to the demise of many good articles.

- Lack of focus in multi-author articles.
- Generalization.
- Swimming in academic background information.
- Short paper aversion (shorter can be better).
- Article is inappropriate for a theme (don't simply change the title of an existing article hoping that it will then be accepted as a theme article).