This is my final installment as editor in chief (EIC) of IC. I’m pleased to be succeeded by Michael (Misha) Rabinovich of Case Western Reserve University, who has served as one of my two associate EICs for a couple of years; Doug Lea handled the special issues for the preceding years. Siobhán Clarke has been the other AEIC for my four years at the helm and will step down sometime next year. Brian Blake and Maarten van Steen have just joined as AEICs to share Misha’s past responsibilities overseeing the special issues. I’m grateful to all of them for their help, as well as the various volunteers who have served on the editorial board for the past few years.

I also want to express my gratitude to the magazine staff. Rebecca Deuel-Gallegos, Jennifer Gardelle, Jenny Stout, and Steve Woods have all had some oversight over the magazine and worked with the volunteers and authors to make it such an outstanding publication. Hazel Kosky and then Joel Luber have served as the magazine assistants — the faces behind the internet@computer.org address.

The Few Swamp the Many
It’s appropriate that I end my term just as IC publishes a special issue on information overload, as that’s been one of the themes I’ve touched on repeatedly in my column. This time, I write the column just as the movie The Social Network, based on the creation of Facebook, is being released. As I’ve heard, the movie focuses on how the company got off the ground. Now, just a few years after its founding, it’s unbelievably ubiquitous, as is another social network (SN) — Twitter. A number of other attempts in this space seem not to have gained the same traction — for example, I remember using Orkut before it was overrun by spam and other abuses. (More on that later.)

Twitter was in the news recently because of a number of XSS (cross-site scripting) attacks that let “junk” tweets spread programmatically like a worm. While that was a case of an unfortunate security exposure, it seems like Twitter doesn’t really need anyone’s help to launch its own denial-of-service attack against its users: the onslaught of messages is such that I find it to be barely usable at all. Information overload? You betcha.

This theme is something I’ve raised before, but it’s increasingly familiar to me as I access these applications more frequently and expand my network of contacts and “followed” accounts. The reason for the change in access paradigm is my shift a few months ago to a fully Internet-enabled phone (http://doi.ieeecomputersociety.org/10.1109/MIC.2010.87), something that I could never again do without — no matter how much it shackles me. But I really have to check myself in my zeal to expand my network: it took no time at all before the rate of updates became so high that I felt I was only seeing a tiny subset of what was going on, with most of the things I was seeing not important enough to obscure what I felt I must be missing because so many tweets would arrive between viewing them. In addition, numerous tweets from a single prolific sender were pushing everything else down out of my view even faster than they otherwise would.

Earlier this year, I postulated that we need agents to prioritize these feeds:

A personal agent that can learn what I care most about and feed me just that information will be a savior, and it seems like the sort of tool that can greatly benefit from the open source community: once a framework for this sort of filtering is available, people can contribute agents with domain knowledge of all types of information sources ranging from email to RSS feeds to social network updates. Join the cause!

Similarly, this issue’s guest editors’ introduction quotes Clay Shirky as calling the problem a “failure to filter.”

Google’s recent changes to Gmail to show users a “priority inbox” that segregates unread, high-
priority mail from everything else is a great step in this direction. Although I found I had to update my filters to better teach Gmail what is and isn’t high priority, I now have a way to see the most important recent email at a glance. Facebook has something similar, in that it can show user updates from the people and groups that the system believes are important, rather than all updates from all users. However, I know of no way to train it to know which things are important. (There used to be “more like this” and “less like this” buttons, but those inexplicably went away.) But Twitter? The native interface is just one big honking stream of updates. There are Twitter clients that let you group accounts into categories, but if there’s a different interface that allows prioritization, I’m not aware of it.

How would I define priority? To be honest, I was surprised to learn there are Twitter clients that try to weed out inactive users (www.scope formoney.com/10-twitter-tools-to-organize-your-tweets). I’m not concerned about people who say little — of course, if I really care about someone, I might be worried I’ll miss their rare expositions. I’m more concerned with people who tweet so often that they drown out everyone else. I like the Google Buzz interface, which often coalesces numerous messages from one person into a counter that can be expanded into the full set of posts. But frequency isn’t the only factor. In any SN that accumulates updates over time, older updates tend to get pushed out of the picture whether they’ve been viewed or not. Often, that’s fine, but sometimes you miss something important.

I’ve gotten around this problem in some cases by adding additional feeds. For example, a handful of people I follow on Facebook tend to post pretty interesting links, so I follow those links with an RSS feed. Whether I use Facebook regularly or not, I have weeks or months to check out those feeds once in a while; the only risk is if I do it so infrequently that my RSS reader drops the old links before I see them, or pushes them out of its queue. This works for a selected set of content, but on the whole, I feel like I’m fending off a hurricane with one of those pink umbrellas they spear oranges with at a bar. Too much comes in, and most goes straight onto the floor.

The (Anti)Social Network

We all know how big a problem spam has been in the realm of regular email — there are estimates that spam accounts for roughly 80 percent of all email. What about SNs? Some clearly do better than others. Orkut, my first foray into an SN, seemed okay until I found that the only activity I had was friend requests from strangers and private messages containing spam. There seemed to be no way to hide my presence from the public at large. Twitter has some similarity because it’s geared toward having a public persona, but the only way I could have gotten spammed was from someone randomly finding my account or seeing a tweet. Facebook lets me limit knowledge of my account to friends and their direct connections, which limits the number of legitimate contacts from potential friends but also cuts down on spam. Public groups, however, are a lost cause (something Facebook has just announced a new approach to addressing). And LinkedIn is pretty good about limiting communication to a trusted chain of connections, but its groups do tend to get overrun by unrelated promotional content.

What to do? One answer, of course, is to simply pass on the whole social networking experience. If you turn off your Twitter account, no one can spam you with it, and you can’t complain about all the hundreds — or is it thousands? — of messages you could potentially flip through at any given time. But I can think of a few things Twitter and its SN cousins could do to make things manageable. First, let me “pin” certain users, such that unseen communications from them are always available. In fact, let me set the rules for different priorities and order by priority instead of by timestamp, just like Gmail.

Second, I want to easily distinguish between public and private pronouncements. I don’t have many followers (largely because I’m intentionally staying under the radar), but
I might want to be able to tell my few followers where I am without telling everyone else! (If you don’t believe this is important, read Shea Sylvia’s piece about being cyber stalked after checking in on Foursquare; www.guardian.co.uk/technology/2010/jul/23/cyberstalked-foursquare.) “Direct” messages on Twitter are limited to being sent only to someone following you; perhaps a similar trust relationship is necessary for other communications.

Third, Twitter should allow anonymous access for one-way communication. If I join a group in Facebook, I might do this to get communications from the group’s owner, and perhaps I am happy to have my friends know I’m in the group. I might be the exception rather than the rule, but I usually don’t want nonfriends to find me through the group or communicate with me. I could even want to participate in discussions in that group without it exposing my identity to the entire group. (Granted, anonymous postings will increase the potential for abuse, and your identity should be exposed to the owner — just not to everyone else.)

Fourth, Twitter should educate its users about their choices. An item recently hit the news about someone who meant to invite people to a party at his or her house but posted it on Facebook as open to all — and got 21,000 RSVPs.

Last, Twitter should do better aggregation. I noticed a nice improvement in Facebook recently, in which it would say that several people had shared the same news item rather than repeating it once for each user. Contrast this with Twitter, which will happily show me the same “retweet” again and again. At the very least, if I could simply add rules to filter out tweets that match particular content, I might stay sane.

I could go on, but it’s dinner time. So long, and thanks for all the fish.

Acknowledgments

The opinions expressed in this column are my personal opinions. I speak neither for my employer nor for IEEE Internet Computing in this regard, and any errors or omissions are my own. Thanks to Barry Leiba (coeditor of the special issue) and my AEIcs for their helpful comments.

References