

# FUNCTIONAL PEARLS

## *Editorial*

JEREMY GIBBONS

Oxford University Computing Laboratory

(*e-mail*: [jeremy.gibbons@comlab.ox.ac.uk](mailto:jeremy.gibbons@comlab.ox.ac.uk))

I have just taken over from Richard Bird as editor of the *Functional Pearls* column in the *Journal of Functional Programming*. I'm keen to receive submissions; please do get in touch if you'd like to discuss a potential paper.

### **What is a Functional Pearl?**

Richard Bird gave an invited talk on *How to Write a Functional Pearl* at the *International Conference on Functional Programming* in Portland, and I heartily recommend that pearl authors and reviewers look at his slides (Bird, 2006) from that talk.

Bird recalls Jon Bentley's *Programming Pearls* column in *Communications of the ACM*, about which Bentley wrote: "Just as natural pearls grow from grains of sand that have irritated oysters, these programming pearls have grown from real problems that have irritated programmers. The programs are fun, and they teach important programming techniques and fundamental design principles." Bentley's description applies to functional pearls too.

Typical functional pearls consist of an instructive example of program calculation or proof, a nifty presentation of an old or new data structure, or an interesting application or programming technique. Bird characterizes them as "polished, elegant, instructive, entertaining". They are not just shorter versions of standard research papers; they are not judged by the same criteria, and need not have the same structure. In particular, they need not have the typical academic paraphernalia of abstract, introduction, conclusion, related work, and thorough referencing. Think more along the lines of short stories—6 to 10 pages, brisk, engaging, accessible, surprising.

Nevertheless, pearls are still subject to peer review. I will continue to give Bird's advice to reviewers, instructing them to stop reading when they get bored, the material gets too complicated, too much specialist knowledge is needed, or the writing is bad.

So, a high standard is required, in both presentation and content. But don't let this put you off: many people have found that writing in the pearl format is fun, and I look forward to receiving many carefully crafted contributions!

### **References**

Bird, Richard S. (2006). How to Write a Functional Pearl. *International Conference on Functional Programming*. <http://icfp06.cs.uchicago.edu/bird-talk.pdf>.