Editorial

Welcome to Computers—A New Open Access Journal for Computer Science

Aaron Quigley

School of Computer Science, University of St Andrews, Fife, KY16 9SX, Scotland, UK;
E-Mail: aquigley@st-andrews.ac.uk; Tel.: +44-1334-461623; Fax: +44-1334-463278

For the past seven decades, computers have radically changed the world we live in. From machines for calculation, computers are now platforms for information processing and computation, supporting the entire spectrum of human endeavour. While computer science is a relatively young field, it is shaping how people live in our modern world. There is not an area of human society that has not been affected by computers and the power they afford us. Computer science touches on every facet of science, art, engineering and economics. Its impact ranges from electronic commerce to improved medical devices; and from enhanced communication to new forms of media and entertainment.

The future, with ubiquitous computational power and natural user interfaces, will extend and enhance all human capabilities. To reach this future we need to quickly and freely disseminate our cutting edge research results globally, and this journal aims to help us achieve that.

For some, the computer is a building block of science or the "new microscope" enabling new forms of scientific discovery. For others, the computer is an essential means to organise and process large amounts of information quickly. Yet we also recognise that computer science research is, by its very nature, an increasingly interdisciplinary activity, influenced by disciplines including psychology, social science, philosophy, education and biomedicine.

Problems and opportunities identified in the current or projected uses of computers gives rise to a wealth of questions. Answering these questions results in new insights into the theoretical foundations of computation, new architectures or programming languages, new algorithms or views of information, advances in CPU design or memory and new forms of software or human–computer interaction.

Many computing sub-disciplines have become distinct areas of inquiry in their own right, with a range of conferences and workshops alongside specialised journals. However, there are clear benefits in a publication venue that supports a constructive exchange of ideas across different areas. This journal aspires to provide such a venue.

Beyond the scientific drivers of specialisation, for many the cost of journal subscriptions gives rise to a narrowing of research interest, and ultimately, a more isolated community of researchers. It is prohibitively expensive for most institutions to subscribe to all journals in which computer scientists might publish. For an individual, small business or small institution, papers are often in venues that are inaccessible behind pay-walls. Today, the nature of online information access is changing how we read publications and affords us the opportunity to publish our results with "open access" while maintaining the highest standards of peer review.

We acknowledge that due to their format, speed of publication and community-building nature, conference publications have been the primary method of disseminating research results in computer science. Recently we have seen conferences align with relevant journals. This allows researchers to present the results from their journal papers in public to their colleagues at an affiliated conference or workshop. We welcome researchers looking to organise special issues to highlight outstanding research on a specific topic that can subsequently be presented at a relevant workshop, symposium or conference along with regular track papers.

Computers is an open access journal that may be viewed freely by anyone with access to a computer. The Editors and Editorial Board will maintain the highest standards of peer review where accepted articles will be immediately published online. An important aspect of *Computers* is that we aim to achieve a fast review cycle that is typical of journals in more established fields of science. We will also allow authors to publish their research results in as much detail as is necessary. These features will ensure *Computers* provides a high impact means of spreading information to the widest audience possible.

In addition to regular papers, our Editorial Board is in the process of determining a number of topical special issues for our first year of publication. We welcome your suggestions for special issues and appropriate guest editors.

I am looking forward to making *Computers* a leading venue for publication in computer science and I welcome your feedback, suggestions or ideas on how to make this journal a success.