
Editorial

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The mission of creative computing is '*unite* and conquer'.

It is a great pleasure to announce the first issue of what is hoped to become a standard forum for publishing creative computing research. This first issue consists of invited articles from leading researchers in the area, providing critical and strategic value for the community, a vision of the evolution of the area and an agenda for research.

The advancement of computing has enabled broad use of computers in all domains. Over the last decade, the rapid innovation in computing has offered ever faster and more versatile access to ever more data, information and knowledge, which enables, directly or indirectly, the transformative social power of the technology. This means in practice that we have control over shaping and reshaping our access to the knowledge and other resources we need to enable us to earn a living, learn, engage in production, meet people, choose information and entertainment, and many other activities essential to determining our quality of life.

Between now and the near future, computing will become even more demanding and challenging. An increasing number of people will be able to participate in computing not only for technical challenges but also for the social implications for human behaviour, which can be even more challenging. Which term best denotes these academic, challenging, inspiring and entertaining computing activities? Creative computing? This also relates to issues of how computing will move forward.

Human beings, in the process of interacting with the world, have followed steps of being curious, being intelligent and being creative. It can be agreed that people have, driven by curiosity, been relatively successful in accumulating vast amount of intelligence/knowledge in diverse disciplines, for example, physical science and social science. How to be innovative to maximise knowledge usage seems to be the present challenge.

Creativity is very difficult, perhaps even very challenging, to define in objective terms, and it takes many forms in human activity. Creativity can mean different things in different contexts (a state of mind, a talent or ability, or a process). Nevertheless, novelty and usefulness are normally the two elements of creativity.

How to be creative? To be creative in computing is to unite! This can be argued in two aspects:

1 Uniting is needed:

- People today are knowledgeable due to well-developed sciences. While learning existing knowledge, people are also continuing to explore new knowledge. To *amalgamate* different contributing research communities together to share resources and *consolidate* ideas are helpful. One demanding issue will be how to *fuse* knowledge and therefore a new ‘science’ to *unify* diverse communities of knowledge seekers and users and thus enhance human living.
- Technology available today is rich. This abundance of technology has given rise to the new challenge of how to *integrate* these technologies. A new ‘technology’ is needed for a growing multi-disciplinary field allowing many areas of research to *converge* towards having a real beneficial influence in our society. Most products involve knowledge from a number of disciplines, such as an aeroplane. In most cases, all components of a system working well individually may not mean that the system will work well when all these components are *assembled*.
- Technology processes and society procedures today are complex. One phenomenon in the world can be viewed differently by different disciplines. For example, the internet: in computing, it is studied for how to improve it; in business, it is studied for how to conduct business transactions; in sociology it is studied for how people’s life is affected, etc. A new ‘method’ is needed to *combine* efforts from different processes/procedures to enable human society to work better.

2 Computing can unite, in particular, when computing is developed with uniting in mind.

- No doubt, computing has helped tremendously in exploring, storing and disseminating knowledge for people; has helped advancing many technologies; and contributed in supplying technological and social environments.
- Observations show that almost all disciplines/professions can link with computing, which evidences that computing is ‘gluing’.
- Now, computing is becoming very ‘*linking*’. Computing itself works all the times seeking to *reconcile* the objective precision of computer systems with the subjective ambiguity of human creativity. Computing knowledge itself is covering and *merging* different disciplines, such as mathematics, physics, engineering, business, law, aesthetics, and many others. It is rather a challenge for computing to become a more effective servant of people by being more adaptive, smarter and better engineered to cope with frequent changes of direction, inconsistencies, irrelevancies, messiness and all the other vagaries that characterise a creative process.

To summarise, a meta-technology is needed to *coalesce* knowledge, which is presumed to be called ‘creative computing’. Therefore, a journal in creative computing emerges naturally and it will emphasises creativity in the technological domain to utilise fully knowledge in humanity domain but not exclude creativity in the humanity domain.

IJCrC is a medium for the exchange of innovative results and the latest research trends in the various topics involved in creative computing. It is further hoped that *IJCrC* will provide opportunities for researchers across the different but relevant fields to learn

about ongoing work in other areas and explore potentials of multi-disciplinary cooperation.

People increasingly turn to computers as aids to creativity and there are growing indications that the topics of creative computing may reshape the world as we know it today. Due to the importance of the subject and its inter-disciplinary nature, a significant amount of research is needed currently in order to advance the subject on different fronts, such as underpinning conceptual frameworks, the techniques, possible processes and even societal regulations which will lead to creative computing-based applications. Hence, it is believed *IJCrC* is timely and offers a stimulating forum for this growing community.

Nowadays, it is computing, computing, everywhere. Computing needs creativity and creativity needs computing. So, creative computing it is. And it is how to *accord, accumulate, adhere, affiliate, agglutinate, agree, ally, amass, articulate, assimilate, associate, band, blend, bond, bracket, bridge, bunch, cement, centralise, chain, clinch, clot, cluster, coadunate, cohere, coincide, collaborate, collect, collude, comprise, concatenate, concentrate, concert, concord, concur, confederate, conglobulate, congregate, conjoin, conjugate, connect, connive, conspire, cooperate, copulate, couple, embrace, encompass, federate, flux, forgather, funnel, gather, harmonise, hitch, hive, horde, huddle, incorporate, intermix, intersect, join, knit, knot, marshal, marry, mass, match, meet, mill, mingle, mix, muster, nip, pair, partner, pool, reciprocate, relate, rendezvous, solder, solidify, span, splice, stream, swarm, synchronise, syncretise, syndicate, synergise, synthesise, tape, throng, tie, wed, weld and yoke* knowledges in the world.

People started deploying science to understand the world with the strategy of ‘divide and conquer’, aiming at eventually exploiting science to serve people. Now, perhaps it is time that people can deploy creative computing to *meld* sciences to serve people, i.e., ‘unite and conquer’.