

Preface

This volume of CCIS contains the revised selected papers of SACLA 2017, the 46th Annual Conference of the Southern African Computer Lecturers' Association, held in the picturesque town of Magaliesburg (Republic of South Africa), July 3–5, 2017. The theme of this conference was: “Keeping Education Relevant: Infinite possibilities.”¹

The goal of the annual meeting of the Southern African computer lecturers is to provide participants with an opportunity to share ideas, while maintaining a high level of academic input from all involved. The accepted papers reflect current trends in teaching and learning in computer science and information systems in tertiary education.

SACLA 2017 called for papers describing educational research projects, classroom experiences, teaching techniques, curricular initiatives, or pedagogical tools. Relevant contemporary topics mentioned in the call for papers included:

- Keeping up with the continuous changes in the fields of computer science and information systems
- Keeping up with changes in technology²
- Adapting to new generations of students
- Keeping relevant by collaboration with industry
- Keeping relevant by “regionalizing” curricula
- Relevance of program/curriculum design
- Didactics and methods of teaching and assessment
- Ethical problems
- Transition of newly graduated school pupils
- Transition of newly graduated students into industry
- International comparability of degrees and levels of knowledge and skill
- Separation or combination of teaching and research
- General matters: best/worst practices, success/failure experiences

The Program Committee comprised 53 members, 30 of whom were from outside South Africa. Each submitted paper was reviewed by three members of the Program Committee in a rigorous, double-blind mode, whereby especially the following criteria were taken into consideration: novel research contribution, methodological soundness, theoretical framing and reference to related work, quality of analysis, and quality of writing and presentation. Of the three reviews for each submission, at least one was provided by an international reviewer (from outside South Africa). After the international dissemination of our call for papers, 63 submissions were initially received and carefully reviewed; 40 of them were chosen for presentation at the SACLA 2017 conference,³ 39 of which were actually presented. Of these submissions, 22 revised

¹ <http://sacla2017.nwu.ac.za>.

² For comparison, see LNET, <http://www.springer.com/series/11777>.

³ The entire program can be obtained via <http://sacla2017.nwu.ac.za/shortprogram/>.

selected papers (plus the extended abstract of the invited keynote lecture by Grandon Gill) were finally included in this volume of CCIS as the conference's most noteworthy contributions.

The overall paper acceptance rate for this book is thus 35%, which shows our commitment to high academic quality.

We were fortunate to have a keynote speaker from the USA, Grandon Gill; the extended abstract of his invited lecture is included in this volume. Moreover, the paper by Anwar Parker and Jean-Paul van Belle (see Table of Contents) received the conference's Best Paper Award.

Affiliated with our conference was a local workshop on the topic: The South African Computing Accreditation Board (SACAB): Implementation and Documentation.

We extend our thanks and appreciation to the conference's Organizing Committee, colleagues, and friends who contributed to the success of SACLA 2017. On behalf of the SACLA community, we also wish to express our deepest appreciation to our sponsors: AdaptIT, IITPSA, IBM, NWU Potchefstroom campus, and SAP. Thank you to the authors, as well as the invited speaker, for having chosen SACLA 2017 as the forum for communicating their noteworthy insights and interesting thoughts. A further word of thanks goes to the members of the Program Committee, who all provided extensive and insightful reviews. Last but not least, many thanks also to the helpful staff of Springer, who have made this CCIS publication possible.

Throughout the remainder of this book, ICT stands for information and communication technologies, comprising computer science, informatics, information science, and similar (related) areas of studies (which cannot be sharply distinguished from each other).

We wish our readers a fruitful reading experience with this volume of CCIS, and we look forward to the continuation of the SACLA series in the following years.

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ICT Education

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