



ELSEVIER

Contents lists available at ScienceDirect

# Theoretical Computer Science

[www.elsevier.com/locate/tcs](http://www.elsevier.com/locate/tcs)


## Preface

## Foreword



This special issue of Theoretical Computer Science is dedicated to Prof. William F. Smyth – known to his friends as Bill – on the occasion of his 80th birthday. It has been organised in recognition and appreciation of his many outstanding contributions to the analysis and design of string processing algorithms and combinatorics on words, and to his numerous academic projects and endeavours.

The issue contains contributions from many of Bill's co-authors and colleagues within the string processing community. The manuscripts were submitted in response to direct invitations from the guest editors, and have been refereed according to the standards and procedures that TCS applies to its normal submissions. Our special thanks are extended to all authors as well as to the anonymous reviewers.

### Bio-sketch

After obtaining his BA in pure mathematics from Toronto University in 1957, a young and intrepid William F. Smyth set out for a career in the real world, programming for business and industry. It was during this period, while analysing the arrangement of concrete sections in the Toronto subway system, that he encountered the graph-bandwidth problem – work that triggered a fascination with combinatorial algorithms that has lasted to this day.

In 1967, Bill joined the United Nations, providing technical assistance in various “developing” countries (Kenya, Italy, Hungary, Romania, Tanzania, India, Israel, Singapore, Sri Lanka), often providing advice on national policy toward computer use. His work on combinatorial algorithms continued at the UN, with several publications, particularly in graph theory.

Retiring from the UN in 1982, Bill took up an academic appointment at McMaster University. He belatedly obtained his M.Sc. (in applied mathematics) from Ottawa University in 1983, and a Ph.D. (in computer science) from Curtin University, Western Australia. He became a full Professor at McMaster in 1992.

Since 1988 his main research area has been string processing algorithms, particularly algorithms for computing exact and approximate patterns in strings. His research monograph, *Computing Patterns in Strings*, appeared in 2003 and serves as the main text for several graduate courses around the world; in 2006 it appeared in Russian translation. In 2007 Prof. Smyth established the String Masters series of meetings, which brings together researchers in string algorithms (especially graduate students and young researchers) to work on open problems in the area. He serves on the steering committee of the International Workshop on Combinatorial Algorithms (IWOCA) and regularly serves as chair or member of conference program committees in combinatorial algorithms. He holds appointments at King's College London, McMaster University, and Murdoch University, and regularly supervises several postgraduate students at Masters and Doctoral levels. At McMaster he is director of the Algorithms Research Group and has held a Canadian NSERC research grant continuously for over 25 years.

Costas Iliopoulos  
Simon J. Pugisi