

Preface

This volume of the Lecture Notes in Computer Science series provides a comprehensive, state-of-the-art survey of recent advances in string processing and information retrieval. It includes invited and research papers presented at the 9th International Symposium on String Processing and Information Retrieval, SPIRE 2002, held in Lisbon, Portugal. SPIRE has its origins in the South American Workshop on String Processing which was first held in Belo Horizonte, Brazil, in 1993. Starting in 1998, the focus of the workshop was broadened to include the area of information retrieval due to its increasing relevance and its inter-relationship with the area of string processing.

The call for papers for SPIRE 2002 resulted in the submission of 54 papers from researchers around the world. Of these, 19 were selected for inclusion in the program (an acceptance rate of 35%). In addition, the Program Committee decided to accept six other papers, considered as describing interesting ongoing research, in the form of short papers. The authors of these 25 papers came from 18 different countries (Argentina, Australia, Brazil, Canada, Czech Republic, Chile, Colombia, Finland, France, Germany, Japan, Italy, Mexico, Saudi Arabia, Switzerland, Spain, United Kingdom, and USA). These papers cover a variety of research topics and were grouped in the following technical sessions:

- *String Matching*
- *String Processing*
- *Web Ranking and Link Analysis*
- *Pattern Matching*
- *Digital Libraries and Applications*
- *Approximate Searching*
- *Indexing Techniques*

Three internationally recognized scholars in the areas of string processing and information retrieval were also invited to submit papers and delivered the following keynote speeches at SPIRE 2002:

- Michael Ley (University of Trier, Germany), *The DBLP Computer Science Bibliography: Evolution, Research Issues, Perspectives*;
- Dan Suciu (University of Washington, USA), *From Searching Text to Querying XML Streams*; and
- Gaston H. Gonnet (ETH Informatik, Zurich, Switzerland), *String Matching Problems from Bioinformatics Which Still Need Better Solutions*.

Several people have contributed to making this symposium possible. First of all, we would like to thank Ricardo Baeza-Yates, who, on behalf of the Steering Committee, invited us to organize SPIRE 2002. We would also like to thank the other members of the Organizing Committee, Edgar Chavez (Publicity Chair),

Cuauhtémoc Rivera Loaiza (Webmaster), Ana Cardoso Cachopo (Local Arrangements), and Ana de Jesus (Administrative Assistant), for their constant support and the great job done. We are particularly grateful to Stephen W. Liddle, from Brigham Young University, for allowing us to use his Web-based conference management software that enabled the online submission of papers and reviews and that made the virtual PC meeting possible. The PC members also deserve our deep appreciation not only for providing timely and detailed reviews of the submitted papers but also for actively participating in the endless e-mail discussions that took place before we could assemble our final technical program. Last, but not least, we would also like to thank the authors who answered the call for papers and made SPIRE 2002 the most successful meeting in this series, so far.

September 2002

Alberto H. F. Laender
Arlindo L. Oliveira

SPIRE 2002 Organization

General Chair

Arlindo L. Oliveira, Instituto Superior Técnico / INESC-ID, Portugal

Program Committee Chair

Alberto H. F. Laender, Universidade Federal de Minas Gerais, Brazil

Publicity Chair

Edgar Chavez, Universidad Michoacana, Mexico

Webmaster

Cuauhtémoc Rivera Loaliza, Universidad Michoacana, Mexico

Local Arrangements

Ana Cardoso Cachopo, Instituto Superior Técnico, Portugal

Steering Committee

Ricardo Baeza-Yates, Universidad de Chile, Chile

Gonzalo Navarro, Universidad de Chile, Chile

Arlindo L. Oliveira, Instituto Superior Técnico / INESC-ID, Portugal

Berthier Ribeiro-Neto, Universidade Federal de Minas Gerais, Brazil

Nivio Ziviani, Universidade Federal de Minas Gerais, Brazil

Program Committee

Alberto Apostolico (Purdue University, USA)

Ricardo Baeza-Yates (Universidad de Chile, Chile)

Michael Benedikt (Bell Labs, USA)

Elisa Bertino (University of Milan, Italy)

Nieves Brisaboa (Universidad de A. Coruña, Spain)

Edgar Chavez (Universidad Michoacana, Mexico)

Roger Chiang (University of Cincinnati, USA)

Fabio Crestani (University of Strathclyde, UK)

Maxime Crochemore (Université Marne-la-Vallee, France)

Bruce Croft (University of Massachusetts, USA)

David W. Embley (Brigham Young University, USA)

Daniela Florescu (XQRL Inc., USA)

Juliana Freire (Bell Labs, USA)

VIII Organization

Edward Fox (Virginia Tech, USA)
Pablo de la Fuente (Universidad de Valladolid, Spain)
Carlos Alberto Heuser (UFRGS, Brazil)
Costas S. Iliopoulos (King's College London, UK)
Vicente Lopez (Universitat Pompeu Fabra, Spain)
João Meidanis (UNICAMP, Brazil)
Ruy Milidiu (PUC-Rio, Brazil)
Alistair Moffat (University of Melbourne, Australia)
Mario Nascimento (University of Alberta, Canada)
Gonzalo Navarro (Universidad de Chile, Chile)
Arlindo L. Oliveira (Instituto Superior Técnico / INESC-ID, Portugal)
Ee-Peng Lim (Nanyang Technological University, Singapore)
Berthier Ribeiro-Neto (UFMG, Brazil)
Marie-France Sagot (INRIA Rhône-Alpes, France)
Fabrizio Sebastiani (CNR, Italy)
João Carlos Setúbal (UNICAMP, Brazil)
Ayumi Shinohara (Kyushu University, Japan)
Veda C. Storey (Georgia State University, USA)
Jorma Tarhio (Helsinki University of Technology, Finland)
Nivio Ziviani (UFMG, Brazil)
Justin Zobel (RMIT, Australia)

External Referees

Hiroki Arimura	M. Mohamed
Anne Bergeron	Edleno Silva de Moura
Pavel Calado	Hannu Peltola
M. Christodoulakis	Yoan Pinzón
Cecil Chua	Cinzia Pizzi
Zanoni Dias	Ian Ruthven
Carina Dorneles	Altigran Soares da Silva
Ana Teresa Freitas	Renato Stehling
Luke A. D. Hutchison	Jesús Vegas
M. Kurokawa	Maria Emilia M. T. Walter
Monica Landoni	Raymond Wan
Wesley Dias Maciel	