

Preface

The papers in this volume were selected for presentation at the Ninth Annual International Symposium on Algorithms and Computation (ISAAC'98), held on December 14–16, 1998 in Taejon, Korea. Previous meetings were held in Tokyo (1990), Taipei (1991), Nagoya (1992), Hong Kong (1993), Beijing (1994), Cairns (1995), Osaka (1996), and Singapore (1997).

The symposium was jointly sponsored by Korea Advanced Institute of Science and Technology (KAIST) and Korea Information Science Society (KISS) to commemorate its 25th anniversary in cooperation with Ministry of Information and Communication, Korea Information Society Development Institute, and Korea Science and Engineering Foundation.

In response to the call for papers, 102 extended abstracts were submitted from 21 countries. Each submitted paper was reported on by at least four program committee members, with the assistance of referees, as indicated by the referee list found in these proceedings. There were many more acceptable papers than there was space available in the symposium schedule, and the program committee's task was extremely difficult. The 47 papers selected for presentation had a total of 105 authors, resident as follows: Japan 24, Germany 17, United State of America 15, Taiwan 10, Hong Kong and Korea 6 each, Spain 5, Switzerland and Australia 4 each, Austria, Canada, and France 3 each, Italy and Netherlands 2 each, and Greece 1.

We thank all program committee members and their referees for their excellent work, especially given the demanding time constraints; they gave the symposium its distinctive character. We thank all who submitted papers for consideration: they all contributed to the high quality of the symposium.

Finally, we thank all the people who worked hard to put in place the logistical arrangements of the symposium — our colleagues and our graduate students. It is their hard work that made the symposium possible and enjoyable.

September 1998

Kyung-Yong Chwa
Oscar Ibarra

Conference Organization

Program Committee Co-Chairs Kyung-Yong Chwa (KAIST, Korea)
Oscar Ibarra (UC Santa Barbara, USA)

Program Committee Takao Asano (Chuo U., Japan)
Ding-Zhu Du (U. of Minnesota, USA)
Susanne Hambrusch (Purdue U., USA)
Hiroshi Imai (U. of Tokyo, Japan)
Tao Jiang (McMaster U., Canada)
Sam Kim (Kyungpook Nat. U., Korea)
D.T. Lee (Northwestern U., USA)
Ming Li (U. of Waterloo, Canada)
Pandur Rangan (IIT, Madras, India)
Sartaj Sahni (U. of Florida, USA)
P. Spirakis (Comp. Tech. Inst., Patras, Greece)
Roberto Tamassia (Brown U., USA)
Shanghai Teng (U. of Illinois, USA)
Osamu Watanabe (Tokyo Inst. Tech., Japan)
Peter Widmayer (ETH, Zürich, Switzerland)
Chee K. Yap (Courant Inst., NYU, USA)
Hsu-Chun Yen (National Taiwan U., Taiwan)

Organizing Committee Chair Jik Hyun Chang (Sogang U., Korea)

Organizing Committee Hee-Chul Kim
(Hankuk U. of Foreign Studies, Korea)
Sang-Ho Lee (Ewha Womans U., Korea)
Kunsoo Park (Seoul Nat. U., Korea)

Sponsors

Ministry of Information and Communication
Korea Advanced Institute of Science and Technology
Korea Information Science Society
Information Processing Society of Japan
Korea Information Society Development Institute
Korea Science and Engineering Foundation

Referees

Alender, Eric	Kim, Sung Ho	Ryu, Kwan Woo
Bai, Mino	Kim, Sung Kwon	Schlude, Konrad
Bellare, Mihir	Kim, Yeong-Dae	Shin, Chan-Su
Bultan, Tevfik	Ko, Ming-Tat	Singh, Ambuj
Chang, Jik Hyun	Konheim, Alan	Smith, Terence
Chang, Shi-Chung	Kontogiannis, Spyros	Stamm, Christoph
Chen, Donghui	Koshiba, Takeshi	Steiner, George
Chen, Ming-Syan	Krithivasan, Kamala	Sung, Ting-Yi
Cheng, Xiuzhen	Kurosawa, Kaoru	Suzuki, Hitoshi
Cho, Hwan-Gue	Lanctot, Kevin	Tang, Chuan-Yi
Cho, Jun-Dong	Lee, Dong Hoon	Toda, Seinosuke
Cho, Yookun	Lee, Jae-Ha	Tokuyama, Takeshi
Chung, Choo Hee	Lee, Sang-Ho	Trachsler, Beat
Cole, Richard	Lee, Seungyong	Tromp, John
Cramer, Ronald	Lei, Chin-Laung	Tsai, Shi-Chun
Das, Sajal	Lim, Hyung-Seok	Tsay, Yih-Kuen
de Wolf, Ronald	Lin, Mao-Chao	Uehara, Ryuhei
Domingo, Carlos	Liotta, Giuseppe	Ulber, Roland
Du, David	Lu, Bing	Verbeurgt, Karsten
Egecioglu, Omer	Lyyu, Yuh-Dauh	Vitányi, Paul
Eidenbenz, Stephan	Ma, Bin	Wagner, Dorothea
Farach, Martin	Ma, Tse-Heng	Wang, Da-Wei
Fatourou, Panagiota	Morita, Ken'ichi	Wang, Yue-Li
Fotakis, Dimitris	Nakano, Koji	Wareham, Todd
Galli, Nicola	Nakano, Shin-ichi	Watanabe, Toshimasa
Garay, Juan	Neyer, Gabriele	Wattenhofer, Roger
Hahn, Sang Geun	Ogata, Wakaha	Wolf, Stefan
Han, Shitou	Okamoto, Ryumei	Wu, Xiaoyu
Hirata, Tomio	Olariu, Stephan	Yamashita, Masafumi
Hsu, Tsan-sheng	Pajarola, Renato	Yamazaki, Koichi
Igarashi, Yoshihide	Palis, Michael	Yang, Tae-Cheon
Imai, Keiko	Pardalos, Panos	Yang, Tao
Inaba, Mary	Park, Chong-Dae	Yang, Wu
Janicki, Ryszard	Park, Jung-Heum	Yoo, Kee Yung
Kaklamanis, Christos	Park, Kunsoo	Yoo, Kwan-Hee
Kaneko, Taishou	Rajasekaran, Sanguthevar	Yu, Sheng
Kim, Chul E.	Rim, Chong S.	Zhang, Louxin
Kim, Dongsoo	Roos, Thomas	Zhou, Xiao
Kim, Sang Dong	Ruan, Lu	