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This volume contains the papers presented at the 8th International Symposium on Experimental Algorithms (SEA 2009). The symposium was held at the Technische Universität Dortmund, Germany, during June 4–6, 2009.

The main theme of the SEA series is the role of experimentation and of algorithm engineering techniques in the design and evaluation of algorithms and data structures. Contributions are supported by experimental evaluation, methodological issues in the design and interpretation of experiments, the use of (meta-)heuristics, or application-driven case studies that deepen the understanding of a problem’s complexity. For each symposium, papers are solicited from all areas of algorithmic engineering research.

Previous meetings, under the name of “Workshop on Experimental Algorithms” (WEA), were held in Riga (Latvia, 2001), Ascona (Switzerland, 2003), Angra dos Reis (Brazil, 2004), Santorini (Greece, 2005), Menorca Island (Spain, 2006), Rome (Italy, 2007), and Provincetown (USA, 2008).

The Program Committee of SEA 2009 received 64 submissions. Each submission was reviewed by at least three Program Committee members and evaluated on its quality, originality, and relevance to the symposium. Overall, the Program Committee wrote 249 reviews with the help of almost 100 trusted external referees. The Committee selected 23 papers, leading to an acceptance rate of 35.9%. The decision process was made electronically using the EasyChair conference management system.

In addition to the accepted contributions, this volume also contains abstracts of the invited talks given by Heinz Bast (Intel), Michael A. Bender (Stony Brook University and Tokutek, Inc.), and Marc Schoenauer (INRIA Saclay – Île-de-France).

We would like to thank all the authors who responded to the call for papers, the invited speakers, the members of the Program Committee, the external referees, and—last but not least—the members of the Organizing Committee.

June 2009

Jan Vahrenhold
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