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Cultural Heritage Papers

David B. Arnold and Andrej Ferko
Cultural Heritage Papers co-chairs, Eurographics 2007

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Preface

Reflecting the importance of the historic centre of Prague as a UNESCO World Heritage site, a special stream on Cultural Heritage was organised for Eurographics 2007. This volume contains the results of this work - the papers presented in the Cultural Heritage stream in Prague on the 6th Sept 2007. Organising this stream brought together programme committee members, authors, and organisations from a wide variety of backgrounds, sharing a common interest in the inter-disciplinary challenges of researching in Computer Science and Informatics to the genuine benefit of the Cultural Heritage Community. It is this interdisciplinary combination that makes working in this field a uniquely challenging and rewarding experience.

It has been our objective to ensure that what is included here represents the best combination of excellent research based on both sound understanding in Computer Science and Informatics, coupled with real appreciation of the challenges faced by professionals in the many diverse fields of Cultural Heritage. This exercise would have been impossible without the cooperation and participation of the members of the programme committee who have worked to tight timescales and offered their judgement, experience and wisdom to advise us on the best selection from the papers submitted. Inevitably in this process there are other papers that contained interesting content but fell below the cutoff for this event. We are grateful to all the authors who were prepared to have their work examined by the reviewers and encourage those who were not successful on this occasion to continue to undertake research in this important field and to bring their results to the attention of the community.

Cultural Heritage materials are frequently considered as divided into tangible and intangible although the distinction is nothing like as clear cut as the words imply. The first may be thought of as relating to physical artefacts and the second to stories, myth, opinions and beliefs. They quickly coalesce in the interpretation of significance of the tangible evidence, presenting additional challenge to representation and processing of our ”knowledge”.

The papers selected for this volume are drawn almost exclusively from the challenges of representing and manipulating tangible cultural heritage artefacts, as might be expected, given the target community for both the call and the event. Issues of interpretation are however relevant to those papers dealing with reconstruction and presentation. The papers by Jansen and Ruttkay and by Zotti lie most clearly in this area, though those dealing with interactive exploration and reconstruction and visualisation of historic sites must also deal with interpreted evidence. The papers by Todt et al and Srisinroongruang et al are both examples of this.

The papers by Schairer et al and Dellepiane et al deal with challenges to computational and efficiency limits arising from the needs of handling large sets of cultural heritage data and this theme is explored as one of the unsolved areas of research in the paper by Arnold.

Overall we believe that there is much in this programme to intrigue and inspire researchers in the broader computer science fields to take up challenges in these multi- and inter-disciplinary fields in their future projects. We hope you will enjoy this programme in its own right and carry forward the inspiration in your future work.

We finish by repeating our thanks for all the work of others involved in this volume - from authorship to production. The success of this volume is down to them; any mistakes are the responsibility of our oversight.

David Arnold and Andrej Ferko

Cultural Heritage co-chairs, EUROGRAPHICS 2007

September 2007

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