Preface

In 1986, B.K.P. Horn published a book entitled *Robot Vision*, which actually discussed a wider field of subjects, basically addressing the field of computer vision, but introducing “robot vision” as a technical term. Since then, the interaction between computer vision and research on mobile systems (often called “robots”, e.g., in an industrial context, but also including vehicles, such as cars, wheelchairs, tower cranes, and so forth) established a diverse area of research, today known as robot vision.

Robot vision (or, more general, robotics) is a fast-growing discipline, already taught as a dedicated teaching program at university level. The term “robot vision” addresses any autonomous behavior of a technical system supported by visual sensoric information. While robot vision focusses on the vision process, visual robotics is more directed toward control and automatization. In practice, however, both fields strongly interact.

Robot Vision 2008 was the second international workshop, counting a 2001 workshop with identical name as the first in this series. Both workshops were organized in close cooperation between researchers from New Zealand and Germany, and took place at The University of Auckland, New Zealand.

Participants of the 2008 workshop came from Europe, USA, South America, the Middle East, the Far East, Australia, and of course from New Zealand.

There were 59 submissions for the workshop. From these, 21 papers were selected for oral presentation and 15 papers were selected for poster presentation. There was one invited talk on the topic of 10 years of robotic soccer competitions, including a look into the future, which was presented by Jacky Baltes (Winnipeg). This talk also enlightened the strong relationship between computer graphics and robotics.

Christoph Stiller (Karlsruhe) organized a special session on the Urban Challenge program. Several system demos were also part of the workshop. The workshop provided ample time for discussion and opportunities for enjoying the beauty of the Auckland region.

We thank the General Workshop Co-chairs, Bruce MacDonald (Auckland) and Uwe Franke (Sindelfingen), for their efforts in organizing this event. We thank all the members of the Program Committee and the local organizers for doing an excellent job. We acknowledge the help of Patrice Delmas and Robert Carter (both Auckland) regarding the Internet presence of the workshop. We thank Lennart Wietzke (Kiel) for his engagement in preparing this volume. Thanks also to the sponsors of this workshop: the ECE department of The University of Auckland and Daimler Germany.

February 2008

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