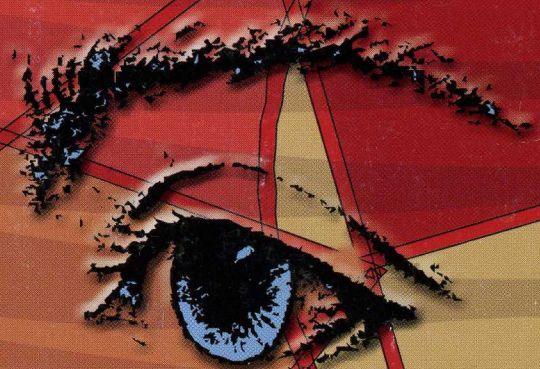




15th International Conference on

Vision Interface

Proceedings



D.D. Gorodnichy
and H. Zhang, Editors

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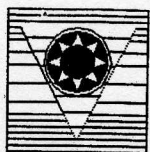
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Message from the Program Chair

Welcome to Calgary and to the *15th International Conference on Vision Interface (VI'2002)*!

Vision Interface conferences have always been known as an excellent forum for both networking and learning. This year is not an exception. With 57 high quality full-size papers selected out of 90 submissions, which underwent thorough reviewing and editing by both the program committee and the program chair; with three invited talks given by the renown scientists on both the theoretical nature of computer vision and the practical aspects of implementing and applying computer vision techniques; with two other conferences: Artificial Intelligence (AI'2002) and Graphic Interface (GI'2002) held jointly - we hope you will find the VI'2002 conference a rewarding and very enjoyable experience.

As in the past, a special effort is devoted to acknowledging the quality of the contributions. Based on the reviewers' comments and the presentations given at the conference, two awards - for the best paper and for the best student paper - will be presented at the conference banquet. In addition, the best twenty papers will be solicited for publishing in a special issue of the *Image and Vision Computing* journal.

Because of the large number of submissions and the desire to keep the conference single-tracked, we have decided to reduce the presentation time to 25 minutes and to make one demo-poster session. We hope however that this would not decrease the level of interaction between the speakers and the audience, but in fact would only provide a wider exposure of the papers to the conference attendees.

We are proud to bring you the proceedings on three different media: a paper hardcopy, a CD-ROM and an on-line version put on the Vision Interface website at www.visioninterface.org. There is no difference between oral and poster papers in the proceedings. It was also realized that many of the demos and related video materials, which cannot be shown in the hardcopy proceedings, would be of the great interest to the readers. Therefore, we asked the authors to provide the additional links to supplement their hardcopy papers. These links appear in the on-line proceedings.

The organization of a conference is a task that requires the collaboration of many people. I personally would like to thank warmly all members of the VI'2002 program committee. Without their help and dedication it would not be possible to produce the proceedings of high-quality papers in such a short time frame. To give you a flavour of the amount of work done, let me mention that there were more than half a million of lines of comments written by the reviewers to the authors. No doubt this was very appreciated! I thank program co-chair Hong Zhang, registration chair John Barron and CIPPRS's president Fathallah Nouboud, whose mutual effort contributed a lot to the success of the conference. I also thank Gerhard Roth and Howard Johnson for hosting the conference website and maintaining the paper review server. And of course, many thanks go to all authors who submitted their papers, no matter whether their papers were accepted or not. It is worth noting that more than half of the conference papers are from outside of Canada, representing research of 18 different countries. This makes the conference truly international. Many thanks to all!

Have a great conference!

Dmitry O. Gorodnichy,
VI'2002 Program Chair

Message du président du comité de programme

Bienvenue à Calgary et à la 15ème conférence internationale Vision Interface (VI2002)!

La conférence Vision Interface a toujours été réputée comme un excellent forum pour la communication et l'apprentissage. Cette année ne fait pas exception. Avec 57 articles de haute qualité sélectionnés parmi 90 soumissions, qui ont subi une évaluation minutieuse par le comité de programme et par le président de ce comité; avec trois conférences invitées données par des scientifiques renommés et portant à la fois sur les aspects théoriques de la vision par ordinateur et sur les aspects pratiques pour implanter et appliquer les techniques de vision artificielle; avec deux autres conférences : Artificial Intelligence (AI2002) et Graphic Interface (GI2002) tenues simultanément, nous espérons que la conférence VI2002 sera pour vous une expérience enrichissante et agréable.

Comme à chaque année, les meilleures contributions sont soulignées et reconnues. Deux prix, meilleur article et meilleur article d'étudiant, seront offerts lors du banquet. La sélection est basée sur les commentaires des membres du comité de programme et sur la qualité de la présentation lors de la conférence. De plus, vingt articles seront publiés dans un numéro spécial de la revue *Image and Vision Computing*.

Vu le grand nombre de contributions et le désir d'éviter des sessions parallèles, nous avons décidé de réduire la durée des présentations à 25 minutes et d'organiser une session d'affiches (posters). Nous espérons cependant que ceci ne réduira pas le niveau d'interaction entre les présentateurs et l'audience, et que ça augmentera plutôt la visibilité des articles auprès des participants.

Nous sommes fiers de vous offrir les actes de la conférence à la fois sur papier, sur CD-ROM ainsi qu'en version en-ligne sur le site web de Vision Interface www.visioninterface.org. Dans les actes, il n'y a pas de distinction entre les articles oraux et les articles affiche. Nous avons constaté que plusieurs démonstrations et séquences vidéo, qui ne peuvent paraître dans les actes papier, seraient d'un grand intérêt pour le lecteur. Nous avons donc demandé aux auteurs de fournir des liens sur ce matériel. Ces liens paraissent dans la version en-ligne des actes.

L'organisation d'une conférence est une tâche qui nécessite la collaboration de plusieurs personnes. Personnellement, j'aimerais remercier chaleureusement tous les membres du comité de programme de VI2002. Sans leur aide et leur collaboration, il n'aurait pas été possible de produire des actes avec des articles de grande qualité dans un court délai de temps. Pour donner une idée de l'ampleur du travail accompli, mentionnons simplement qu'il y a eu plus d'un demi-million de lignes de commentaires aux auteurs rédigées par les évaluateurs. Il n'y a aucun doute que ceci fut apprécié ! Je remercie le co-président du comité de programme Hong Zhang, le responsable des inscriptions John Barron et le président de CIPPRS Fathallah Nouboud, dont les efforts complémentaires ont contribué de façon significative au succès de la conférence. Je remercie aussi Gerhard Roth et Howard Johnson pour l'hébergement du site web de la conférence et la maintenance du serveur supportant le processus d'évaluation des articles. Bien sûr tous mes remerciements aux auteurs qui ont soumis un article, qu'il ait été accepté ou non. Il faut noter que plus de la moitié des articles de la conférence proviennent de l'extérieur du Canada, représentant la recherche de 18 pays différents. Ceci fait de Vision Interface une conférence vraiment internationale. Merci beaucoup à toutes et à tous !

Bonne conférence !

Dmitry O. Gorodnichy,

Président de programme de VI'2002

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