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Computing



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Preface

This document contains the discussion abstracts and student papers presented at the International Workshop on Biologically Inspired Information Fusion, organised for August 2006 at the University of Surrey.

The workshop was organised to create collaboration between life and physical scientists to investigate biologically inspired information fusion. The aim was to learn from these different communities in order to explore the various known and hypothesised approaches to natural and artificial sensor fusion, in order to develop adaptive information fusion systems, whilst considering how a computational approach to information fusion will help improve our understanding of biological multi-sensory processing.

The workshop consisted of invited tutorials from discipline leaders to help summarise current knowledge of their field for a multi-disciplinary audience. Rising to this challenge were Professor Barry Stein (Department of Neurobiology and Anatomy, Wake Forest University School of Medicine), Dr Gemma Calvert (Multisensory Research Group in the Department of Psychology, University of Bath), Dr Charles Spence (Department of Psychology, Oxford University), Dr Belur Dasarathy (Editor-in-Chief of the Elsevier Information Fusion Journal and technologies consultant) and Dr Gerard McKee (School of Systems Engineering, University of Reading).

In addition to tutorials, discussion abstracts and student papers were invited for peer review for inclusion in the programme. The resulting accepted abstracts and papers are contained in this document.

We would like to thank all those who took part in the workshop, especially those reviewing abstracts and papers. A special vote of thanks goes to Sophie Gautier and Heather Norman for all their effort in making the event go as smoothly as possible. Thanks also go to the Institute of Advanced Studies at the University of Surrey, especially Nigel Gilbert, and the Engineering and Physical Sciences Research Council (grant number EP/E012795/1) for providing funds to support this initiative.

Guildford, August 2006

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Contents

| | |
|---|----|
| Information Coding in Spike Trains <i>Alex Thomson</i> | 1 |
| Distance From Discriminability: A Fechnerian Scaling Approach to Multisensory Integration <i>Hans Colonius and Adele Diederich</i> | 2 |
| Audio-Visual Speech Processing: A Case Study of Biologically-Inspired Information Fusion <i>Robert Damper</i> | 4 |
| Audition: More Than Speech Recognition! <i>Leslie Smith</i> | 6 |
| Information Recovery from Rank-Order Encoded Images <i>Basabdatta Sen and Steve Furber</i> | 8 |
| Multi-Sensor Fused Video Assessment using Scanpath Analysis <i>Timothy Dixon, Stavri Nikolov, John Lewis, Jian Li, Eduardo Canga, Jan Noyes, Tom Troscianko, Dave Bull, Nishan Canagarajah</i> | 14 |
| Directing Visual Attention towards Human Activity <i>Craig Bennett and Khurshid Ahmad</i> | 20 |

