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Audio- and Video-Based Biometric Person Authentication

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Series Editors

Gerhard Goos, Karlsruhe University, Germany
Juris Hartmanis, Cornell University, NY, USA
Jan van Leeuwen, Utrecht University, The Netherlands

Volume Editors

Josef Bigun
Fabrizio Smeraldi
Halmstad University
School of Information Science,
Computer and Electrical Engineering
P.O. Box 823, S-301 18 Halmstad, Sweden
E-mail: {josef.bigun/Fabrizio.smeraldi}@ide.hh.se

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Preface

This book collects the research work presented at the Third International Conference on Audio- and Video- Based Biometric Person Authentication that took place in Halmstad, Sweden, in June 2001.

As in the preceding two cases, the conference announcement met with a consistent positive response both from industry and the research community. Since 1997, when the first conference took place, the field of Biometric Person Authentication has witnessed the development of commercial solutions that testify the practical relevance of the subject. On the other hand, the high quality of the research papers collected in this volume confirms the scientific importance and the challenging nature of the problems underlying this multi-disciplinary research field.

The volume represents a necessarily concise survey of state-of-the-art techniques in the field and addresses the topics:

- Face as biometrics.
- Face image processing.
- Speech as biometrics and speech processing.
- Fingerprints as biometrics.
- Gait as biometrics.
- Hand, signature, and iris as biometrics.
- Multi-modal analysis and system integration.

Compared to the previous editions, fingerprints and gait have gained emphasis. The book also includes three invited contributions:

- Anil Jain (Michigan State University, USA),
- Josef Kittler (University of Surrey, UK), and
- Satoshi Nakamura (ATR, Japan).

We believe that a sizable contribution of the proceedings resides in its multi-disciplinary character. Growing demands for conjugating security with the mobility and flexibility required by emerging applications, e.g. mobile electronic commerce, can only be addressed through a close cooperation between the communication and the computer science communities. It is likely that multi-modality will play a key role in future authentication systems, which will afford a high degree of robustness to shifting usage conditions and adaptability to scalable security requirements.

We gratefully acknowledge the contributions of the Program Committee, the referees, as well as the sponsoring organizations.

Organization

The international conference AVBPA 2001 was organized by

- the **School of Information Science, Computer and Electrical Engineering**, of Halmstad University, Sweden,
- **TC-14** of IAPR (International Association for Pattern Recognition).

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