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Transactions on Data Hiding and Multimedia Security VIII

Special Issue on Pattern Recognition for IT Security

Springer

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Guest Editorial Preface

Special Issue on Pattern Recognition for IT Security

Graphical data, such as images or video streams, are of growing importance in several disciplines of IT security. Examples range from biometric authentication over digital image forensics to visual passwords and CAPTCHAs. Consequently, methods of image analysis and pattern recognition are increasingly used in security-critical applications. Still, there is a significant gap between the methods developed by the pattern recognition community and their uptake by security researchers.

In an attempt to close this gap, a workshop on Pattern Recognition for IT Security was held on September 21, 2010, in Darmstadt, Germany, in conjunction with the 32$^{\text{nd}}$ Annual Symposium of the German Association for Pattern Recognition (DAGM 2010). The session was chaired by Jana Dittmann (Otto-von-Guericke Universität Magdeburg), Claus Vielhauer (Fachhochschule Brandenburg) and Stefan Katzenbeisser (Technische Universität Darmstadt).

This special issue contains five selected papers that were presented at the workshop and that demonstrate the broad range of security-related topics that utilize graphical data. Contributions explore the security and reliability of biometric data, the power of machine learning methods to differentiate forged images from originals, the effectiveness of modern watermark embedding schemes and the use of information fusion in steganalysis.

We hope that the papers in this special issue are of interest and inspire future interdisciplinary research between the security and graphics communities.

March 2012 Stefan Katzenbeisser

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