

Biometrics must respond to human aging

November 6 2013

The accuracy and reliability of systems which identify individuals from biometric characteristics, such as facial image, fingerprints or handwriting, could be significantly compromised if we do not take account of the effects of human aging.

This is the central point in the first book of its kind to address the effects human ageing has on biometrics.

Edited by the University of Kent's Professor Mike Fairhurst, one of the UK's leading biometric researchers, and entitled *Age Factors in Biometric Processing*, the book brings together international experts to discuss the effects ageing will have on the way [biometric systems](#) are designed and deployed. It also highlights the barriers age factors can have on the way systems are used, including the extent systems can cope with changes in biometric data of an individual, such as facial changes due to old age.

The book also focuses on a selection of positive aspects relating to age factors and how these can contribute to establishing a broader picture of [biometric data](#) of an individual. For example, if someone's age can be estimated, this information can be used to give greater confidence in identifying them. Similarly, systems can be used to predict age which could be useful in many applications, including supporting the forensic investigation of crime.

Professor Fairhurst, Professor of Computer Vision in the University's School of Engineering and Digital Arts (EDA), said: 'Biometric

technologies are very well established, but we now need to think about how we use such systems in the longer term. Understanding the relationship between age and the nature of biometric measurements is very important in producing the next generation of biometric identification systems, but is also an important element in broadening the range of applications where biometrics can have a significant benefit.'

Dr Meryem Erbilek and Dr Marjory Da Costa-Abreu, also researchers from EDA at Kent, provide contributions within the book.

Professor Fairhurst leads a research group with broad interests in the fundamental processes of image analysis and pattern recognition, with a particular focus on applications in security and especially biometrics. He is also Editor-in-Chief of the *IET Biometrics Journal*.

Age Factors in Biometric Processing is published by the IET.

Provided by University of Kent

Citation: Biometrics must respond to human aging (2013, November 6) retrieved 23 April 2024 from <https://phys.org/news/2013-11-biometrics-human-aging.html>

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