Call for Book Chapters

“Handbook of Ear Biometrics”

Nowadays, there is an increased interest in using human biometrics for authentication and identification purposes. Biometrics, providing unique signatures of humans have replaced the conventional authentication data such as passwords, with great success. Moreover, they helped towards the development of personalized devices (mobile phones, tablets, cameras, etc.) and services. Physiological biometrics such as face, iris, fingerprint as well as behavioral biometrics e.g. gait, keystroke dynamics, have been widely used in the past years.

Quite recently, the biometrics based on human ear morphology have attracted the attention of the scientific community to overcome some limitations of the traditional biometrics. Ear biometrics show less variability in time compared to face and fingerprint, while they can be measured with less human intervention than the iris ones.

The theory, algorithms and techniques relative to ear biometrics research direction constitute the subject of this call, aiming to promote fundamental and innovative trends and perspectives in theory, as well as in practice.

The best way to capture the current research activity and to set the perspectives and challenges in this field is by selecting high quality work from different worldwide invited researchers, in the form of chapters of an edited book.

Science Gate Publishing (SGP) in collaboration with an eminent scientist in the field of ear biometrics decided to organize the publication of an edited book. This book belongs to the series of the publisher “Gate to Computer Science and Research” (GCSR Vol.8) having the title “Handbook of Ear Biometrics”.

This edited book aims to bring together the most active and eminent scientists working in the field of ear biometrics. This participation is expected to be followed by the presentation of new ideas, trends and prospects through original and well established works in the form of book chapters.
Topics of Interest

Original contributions, not currently under review to a journal or a conference, are solicited in relevant areas including, but not limited to, the following:

- Ear localization/detection
- Ear registration
- Ear representation and feature extraction
- Ear recognition
- Ear indexing
- 3D/2D ear processing
- Multidisciplinary applications
- New datasets
- Evaluation of algorithms

Instructions for Authors

- The initial chapter proposal should be maximum 4 pages
- The length of the final book chapter should be maximum 30 pages
- The language of the book chapter is English
- The chapter proposal should be submitted in PDF format
- The article processing and publication charges are in accordance with the publisher’s regulations
- Please read the instructions for authors provided by the publisher
- A free hardcopy of the Edited book will be sent by post to the author(s) of each contributed chapter
- All chapters should be submitted to gcsrvol8@sciencegatepub.com
### Important Dates

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<td>29 June, 2015</td>
<td>Proposal Submission</td>
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<td>Decision Notification</td>
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<td>Full Chapter Submission</td>
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### Guest Editors

Asst/Prof. Syed Mohammed Shamsul Islam  
Research Assistant Professor School of Dentistry, The University of Western Australia  
and  
Research Fellow, Department of Mechanical Engineering, Curtin University, WA.  
e-mail: syed.islam@uwa.edu.au/shams.islam@curtin.edu.au/shams.webmail@gmail.com  
GoogleScholar

### Message from the Guest Editor

This book will be the first of its kind in accumulating the current and past research in detection and recognition of ear biometrics and its different applications. It will also highlight the current challenges and future research directions in this emerging research area.

Asst/Prof Islam completed his PhD in Computer Engineering with distinction from the University of Western Australia (UWA) in 2010. In his PhD study, he developed innovative algorithms for a very fast and reliable detection and recognition of ear from 2D and 3D images. He also combined ear biometrics with the face and developed a very much secured multi-biometric human recognition system. His works have been published in high ranking scientific journals in the area of Image Processing and Computer Vision including ACM Computing Surveys, Pattern Recognition and International Journal of Computer Vision. He also published a book chapter and presented his research in a number of highly regarded conferences including IEEE Workshop on Application of Computer Vision, International
Symposium on 3D Data Processing, Visualization and Transmission and Digital Image Computing: Techniques and Applications (DICTA). In total, he has published ten journal articles, two book chapters and 21 fully refereed conference papers. His works, especially those in the area of ear biometrics have been highly cited by the scientific community including some prominent researchers in the field. He has a total of 238 Google Scholar citations (March 30, 2015) with an h-index of 9. His innovative works in this field also attracted five public media releases. He is currently working as an academic researcher in the University of Western Australia and Curtin University in Perth, Western Australia. He has secured seven competitive research grants (totalling $158,757 and co-supervised to completion seven honours and postgrad students. He is also serving the scientific community as Associate Editor of nine international journals and a regular reviewer of 16 others. He also served as Technical Committee Member of 18 conferences and submission reviewer of 19 others. He is also a member of seven professional bodies, including IEEE and Australian Computer Society.

**Message from the Publisher**

We are pleased to announce that [Prof. Mark Nixon](#), a pioneer in the field of ear biometrics over the last two decades, has honored us by accepting writing the Preface of this edited book.