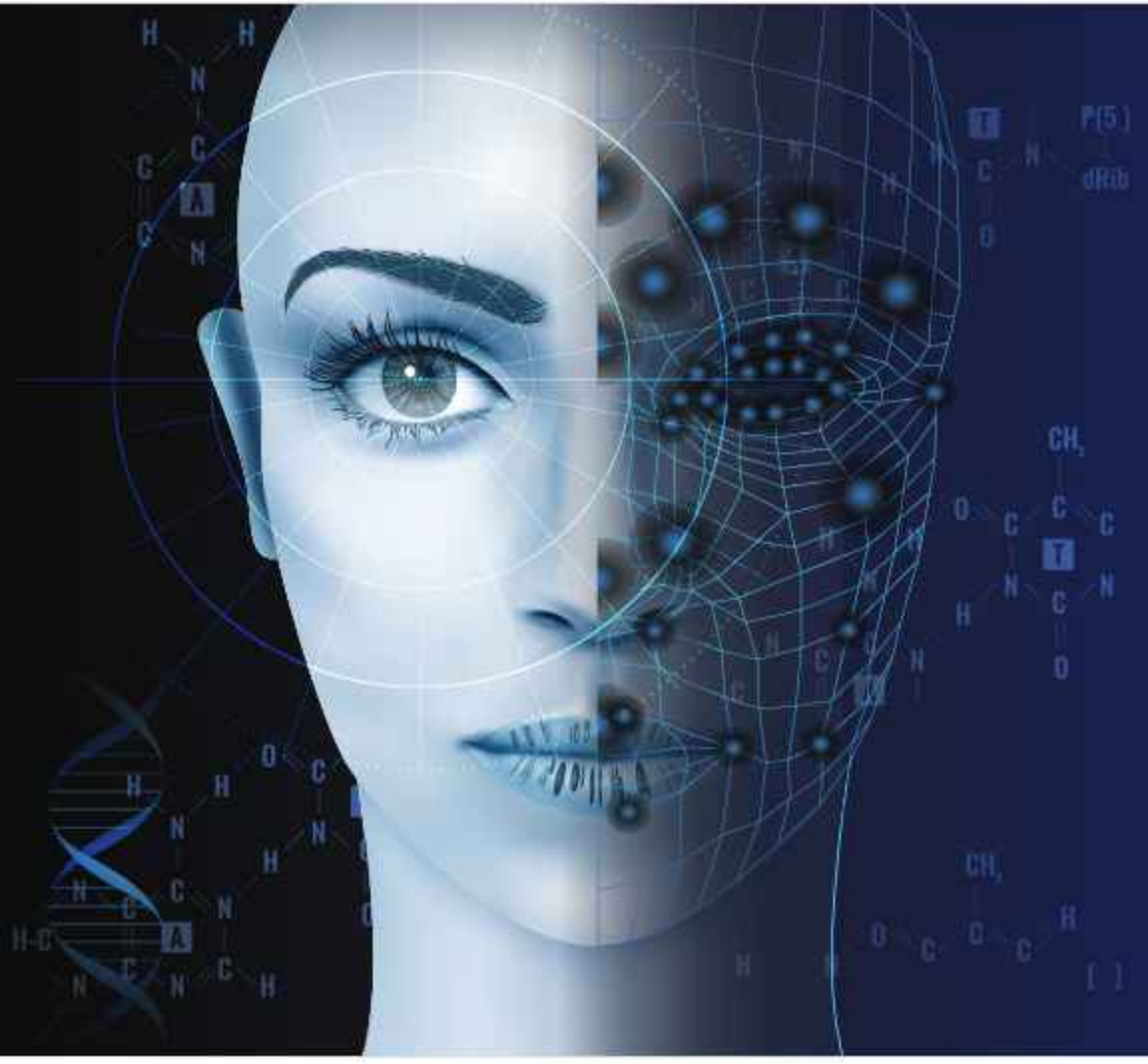
NON-COOPERATIVE MULTIMODAL BIOMETRIC
ISSUES AND SOLUTIONS



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Penerbit
Universiti Malaysia Pahang Al-Sultan Abdullah
Kuantan
2024

Penerbit
Publisher

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First Published, May 2024

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Cataloguing-in-Publication Data
Perpustakaan Negara Malaysia
A catalogue record for this book is available from the National Library of Malaysia
ISBN 978-629-7641-05-5

Director Penerbit : Dr. Mel
Editor : A. R. Aria
Proofreader : A. R. Aria & D. Asia
Graphic Designer : R. W. Channie
Administration : A. Amami & N. A. Aryan
Sales & Marketing : N. H.

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Official Page (FB) : Penerbit UMPSA
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Published By
Penerbit
Universiti Malaysia Pahang Al-Sultan Abdullah
Lebuh Persiaran Tun Khalil Yaakob,
26300 Gambang, Kuantan,
Pahang Darul Makmur.
Tel: 09-431 5034

Printing
M PRINT SOLUTION
NO 38-1, Jalan PBS 14/8,
Taman Perindustrian Bukit Serdang,
43300 Seri Kembangan, Selangor Darul Ehsan.
Tel: 03 - 8959 6132
Email: mprint09@gmail.com

PREFACE

In the dynamic arena of the modern security paradigm, where the combination of technology and identity verification is at the centre of attention, we are proud to reveal a comprehensive adventure contained in the page "Non-Cooperative Multimodal Biometrics: Issues and Solutions". This book organises an in-depth expedition into the complicated domain of periocular analysis, especially in the context of low-resolution iris recognition. In doing so, it offers invaluable insight into both the challenges and promising prospects of using periocular cues to achieve accurate biometric recognition. This book is supported by grant RDU180378 – Develop A New Multimodal Biometric Authentication Algorithm for Mobile Security.

Beyond its focus on periocular intricacies, this book aspires to present a panoramic view of non-cooperative multimodal biometric authentication. Serving as a nexus between scholarly insights and pragmatic implementation, it serves as an enlightening guidepost for researchers, students, and professionals navigating the labyrinthine paths of biometric security.

As we move through the following chapters, our aspiration is that readers will gain a deep understanding of the fundamental challenges that underlie the biometric landscape, along with smart solutions that pave the way forward. This effort seeks to bridge the cognitive gap, making the technical dimensions of biometric solutions accessible to a wider spectrum of enthusiasts, interested in leveraging their effectiveness. We expect this book to spark dialogue, ignite further inquiry, and contribute meaningfully to the relentless

evolution of biometric security in our increasingly complex global landscape.

ACKNOWLEDGEMENT

In the pages of "Non-cooperative Multimodal Biometrics: Issues and Solutions," the culmination of our collective efforts underscores the power of collaboration and shared vision. This book stands as a testament to the potential that arises when minds come together to unravel complex challenges.

Thanks to our advisor, mentor and colleague, Dr Muhamad Razib Othman, who guided our intellectual journey and pushed us to go beyond the boundaries of our knowledge. Creating this book involved a dynamic interplay of ideas, and we appreciate your expert in the field, enriching our discussions and collaborative efforts.

We are grateful to the publishers, UMPSA Press, for believing in our efforts and providing a platform to share our views with a wider audience. Your support is invaluable in making this book a success.

Behind the scenes, our family and loved ones provide unwavering support. Your patience, encouragement and understanding during the writing sessions have been our constant motivation.

In this book, we aim to outline the challenges of non-cooperative multimodal biometrics and propose solutions that shape the future of identity recognition. As readers engage, we hope to inspire conversation, new perspectives and new discoveries.

"Non-Cooperative Multimodal Biometrics: Issues and Solutions" covers a shared journey of discovery, resilience and collective aspiration. To all who contributed, whether through conversation, criticism or silent encouragement, our deepest appreciation.

With gratitude and hope,
Anis Farihan Mat Raffei
Hishammudin Asmuni @ Hasmuni
Rohayanti Hassan

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