Nanyang Technological University Back Image Database Version 1 Release Agreement

The goal of the Nanyang Technological University Back Image Database Version 1 (NTUBDB v1) is to develop new technologies, techniques, methods, algorithms and systems for automatic criminal and victim identification based on skin biometrics in forensic settings. As this is the first back image database dedicated to criminal and victim identification, to speed up the technology development in this area, we would like to share the database to other scientists who are interested in this area of research on a case by case basis.

The images were collected from subjects with different ages and ethnic groups (e.g., Chinese, Malay, Indian, and Caucasian). The images were captured in indoor environments using different DSLR cameras. Majority of the images were captured in two different sessions with an interval ranging from one to two weeks. The subjects were not given strict pose instructions during the image collection process. Faces are blocked and images with tattoos are removed from the database to protect the identity of the subjects. Numbers are used as filenames. To reduce downloading time, the background is also removed and images are segmented. The images are available in .jpg format; no other image formats will be provided.

To receive a copy of the database, researchers must sign this document and thereby agree to observe the restrictions listed in this document. Failure to observe the restrictions listed in this document will result in access being denied for the balance of the NTUBDB v1 and being subject to civil damages in the case of publication of images that have not been approved for release, a violation of restrictions 3, 4 and 5 below. The database will be available to researchers in the form of online. There will be no charge for the database. The researcher(s) agree/s to the following restrictions on the database:

1. The NTUBDB v1 will not be further distributed, published, copied, or further disseminated in any way or form whatsoever. This includes further distributing, copying or disseminating to a facility or organization unit in the requesting university, organization, or company.

2. All requests for copies of the database will be forwarded to the person in charge at the Nanyang Technological University (NTU), Singapore.

3. Images, including the original images in the database and resultant images derived/inferred from this database, that can appear in technical reports, papers, and other documents published or released, are those with the mark "Permission to display: Yes". All other images will never appear in any document of any form. Any image including in processed/modified forms will never be released on the Internet, in commercial materials, newspapers, talk, meetings, papers, or other forms of public media.

4. All the images will be used for the purpose of academic or scientific research in forensic identification only. The database, in whole or in part, will not be used for any commercial purpose in any form. Commercial distribution or any act related to commercial use of this database is strictly prohibited.

5. The images will never be associated to any persons or any group of persons as the volunteers who offered the images.

Cyber Security Laboratory, School of Computer Engineering
Nanyang Technological University Singapore
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6. All documents and papers reporting research results obtained using the database will acknowledge the use of the NTUBDB v1 using the following statement: "Portions of the research in this paper use the Nanyang Technological University Back Image Database Version 1. Credit is hereby given to the Cyber Security Laboratory at the School of Computer Engineering, Nanyang Technological University, Singapore for providing the database." The documents and papers will also add citations to :

    [1]Arfika Nurhudatiana, Adams Kong, Lisa Altieri and Noah Craft, "Automated identification of relatively permanent pigmented or vascular skin marks (RPPVSM)", *proc. of International Conference on Acoustics, Speech and Signal Processing,* pp. 2984-2988, 2013.

    [2]Arfika Nurhudatiana, Adams Kong, Keyan Matinpour, Deborah Chon, Lisa Altieri, Siu-Yeung Cho and [#]Noah Craft, "The individuality of relatively permanent pigmented or vascular skin marks (RPPVSM) in independently and uniformly distributed patterns", *IEEE Transactions on Information Forensics and Security,* vol. 8, no. 6, pp. 998-1012, 2013.

7. A copy of all published papers, reports, and other documents that use the database must be sent to the Cyber Security Lab at NTU through email (forensics@ntu.edu.sg) for *approval prior to release for public or publication.

8. Images in this database and results derived from this database will only be stored in the IT infrastructure/systems owned by the organization that the researchers work for. Images in this database and results derived from this database will never be stored in the IT infrastructure/systems owned by other organizations, including but not limited to, icloud and dropbox.

9. While every effort has been made to ensure accuracy, the database owners cannot accept responsibility for errors or omissions. The database owners reserve the right to revise, amend, alter or delete the information provided herein at any time, but shall not be responsible for or liable in respect of any such revisions, amendments, alterations, or deletions.

10. The database owners reserve the right to terminate the usage permission of the database given to the researcher(s) at any time. Once the researchers receive the notification of termination, they must immediately delete the entire database and all results derived from this database in their systems.

*If researchers do not receive objection from the Cyber Security Lab within 30 days that they receive the request for approval, approval is automatically granted.

The person in charge:
Associate Professor Adams Kong
School of Computer Engineering
Nanyang Technological University
Block N4, 50 Nanyang Avenue Singapore 639798
forensics@ntu.edu.sg

Download instruction:

All requests for the NTUBDB v1 must be directed (by email) to the following address: forensics@ntu.edu.sg. Applicants should **manually fill, sign, scan and attach** the application form to the given email address. Upon receipt of an executed copy of the signed application form, access instructions will be given.

This database request is made by:

(SIGNATURE & DATE)

FULL NAME: _____

POSITION: _____

ORGANIZATION: _____

ADDRESS: _____

_____

EMAIL: _____