## License Agreement for the Laboratory of Technological Research in Pattern Recognition Natural-based Synthetic Palm Vein Database: NS-PVDB (version 1.0)

In order to stimulate research in palm vein recognition on large-scale datasets, the Laboratory of Technological Research in Pattern Recognition (LITRP) of the Universidad Católica del Maule, makes the Natural-based Synthetic Palm Vein Database (NS-PVDB) publicly available to the scientific community. The LITRP reserves all rights of the NS-PVDB and serves as the source for the database distributed for academic research purpose.

NS-PVDB is comprised of 2,000 subjects with 6 samples per each, which were obtained by applying sample augmentation. Since palm vein recognition systems only use a region-of-interest (ROI) from the image of a human hand, we concentrate our study on generating ROI samples of palm vein images. The synthetic images were generated based on natural transport network to simulate the palmar vascular network and generate palm vein images for biometric recognitions purposes. All generated images were compared against all samples in the synthetic dataset aiming to ensure that each individual is unique in the database. Images are labeled as follow: ID\_sample.png where "ID" is a 5-digits number representing individual's ID, and "sample" stands for the sample number from 1 to 6 (6 samples per individual). The format of the images is PNG, and the size is 128x128 pixels.

To request a copy of the database, the researcher must fill out and sign this document, and then send it by email to the Principal Researcher (Dr. Ruber Hernández-García), and agree to observe the restrictions listed below:

- 1. <u>Distribution</u>: The LITRP is the only institution that can distribute the database. Without prior approval from LITRP, the NS-PVDB database (version 1.0), in whole or in part, will not be further distributed, published, copied, or disseminated in any way or form whatsoever, whether for profit or not.
- 2. <u>Modification and Commercial Use</u>: Without prior approval from LITRP, the NS-PVDB database (version 1.0), in whole or in part, cannot be modified and use for commercial purposes.
- 3. <u>Request for the database</u>: All request for the NS-PVDB database (version 1.0) must be sent to the Principal Researcher in the form of a signed copy of this document.
- 4. <u>Citation</u>: All documents and papers that report experimental results performed on this database must cite the following paper:
  - Salazar, E., Hernández-García, R., Barrientos, R. J., Vilches, K., Mora, M., and Vázquez, A. (2021): "Automatic Generation of Synthetic Palm Vein Images: a Nature-based Approach". In 11th International Conference on Pattern Recognition Systems (ICPRS21), Talca, Chile.
- 5. <u>Acknowledge</u>: All documents and papers that report experimental results performed on this database should acknowledge the use of this database in Acknowledgement section of the document. A text of thanks similar to the following is suggested:

"The authors of this paper thank the Laboratory of Technological Research in Recognition of Patterns (LITRP) of the Universidad Católica del Maule, Chile, for sharing the Natural-based Synthetic Palm Vein Database (NS-PVDB)."

- 6. Report acceptance of publication: Authors who publish a paper agree to inform to LITRP of said publication. LITRP reserves the right to include the citation of the paper on the LITRP website as a database use case.
- 7. <u>Amendments</u>: LITRP is allowed to amend this License at any time without prior consent of the End User.
- 8. <u>Warranties</u>: The End User warrants that they are authorized signatory, adult, and not legally forbidden to enter into this License. The End User warrants that they have read and understood all elements contained herein and that the signature apposed hereunder is the result of a fully aware decision.
- 9. <u>Legal Disclaimer</u>: The database is granted without any warranty. LITRP shall not be held responsible for any damage (physical, financial or otherwise) any illegal or criminal use caused by the use of the database by the End User.

By signing this License, the End User engages to strictly respect the conditions set forth herein. Failure to respect these restrictions may result in the revocation of the permission to use the database, as well as the denial of access to additional databases distributed by LITRP.

It is requested to complete and sign the following information of the End-User (Authorized Signatory). Please also notice that students are not eligible, therefore the request must be made and signed by their supervisors. Please, fill out all fields in block letters.

i un ivanic.
Title / Function:
Organization Name and Address (Institute, University, etc):
Email:
Date:
Description of the use of the database (education, research, university projects, etc.):
Signature:

Full Name

Please send the filled in and signed license agreement to Dr. Ruber Hernández-García (Principal Researcher) by the following email: <a href="mailto:rhernandez@litrp.cl">rhernandez@litrp.cl</a>. After receiving the email including the present agreement document, a link will be sent to download the database.