University of Notre Dame Biometrics Dataset Release Agreement Masked Physiological Monitoring (MPM) Dataset UND Principal Investigator(s): Dr. Patrick J. Flynn, Dr. Kevin Bowyer, and Dr. Adam Czajka

Introduction: The goal of our biometrics research is to develop new techniques, technology, and algorithms for the automatic recognition of humans. Datasets that we have collected are meant to aid research efforts in the general area of developing, testing and evaluating human recognition algorithms. The University of Notre Dame du Lac (henceforth, "UND") owns copyright of the collection of biometric images and serves as the source for the UND Biometrics Dataset.

The Masked Physiological Monitoring (MPM) dataset contains 159 video recordings from 54 human subjects wearing protective face coverings. Each recording consists of a 1920x1080 resolution losslessly compressed RGB video recorded at 90 frames per second with simultaneous PPG collected from two fingertip oximeters. Each recording lasts a minimum of 3 minutes where subjects converse, move their head, and sit still, resulting in over 8 hours of data. Baseline rPPG results are presented in the original paper cited in item 6 below. All data is de-identified.

Release of the Database: To advance the state-of-the-art in human recognition, to the extent permitted by law, the MPM dataset will be made available to researchers in face recognition on a case-by-case basis only. All requests for the MPM dataset must be submitted in writing to UND by the researcher's institution on behalf of the individual researcher or research unit (henceforth the "Licensee"). To the extent permitted by law, to receive a copy of the MPM dataset, the requesting organization must sign this document and agree to observe the restrictions listed below. In addition to other possible remedies, failure to observe these restrictions may result in revocation of permission to use the data as well as denial of access to additional datasets distributed by UND. The dataset will be distributed over the Internet to licensees only. There will be no charge for data made available and downloaded via the Internet.

Consent: The researcher(s) agrees to the following restrictions on the MPM dataset:

- **1. Redistribution:** Without prior approval from the UND Principal Investigator, the MPM dataset, 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. This includes further distributing, copying or disseminating to a different facility or organizational unit within the requesting university, organization, or company.
- 2. Protection of de-identification: There shall be no attempt made to defeat the de-identification of the data provided.
- **3. Destruction:** Licensee agrees to destroy certain images in the dataset, or to destroy all copies of the dataset, if requested by the UND Principal Investigator.
- **4. Modification and Commercial Use:** Without prior approval, the MPM dataset, in whole or in part, may not be modified or used for commercial purposes. The license granted herein is specifically for the internal research purposes of Licensee, and Licensee shall not duplicate or use the disclosed dataset, its contents, or any seal, logo, mark, or phrase associated with or owned by UND to manufacture, promote, or sell products or technologies (or portions thereof) either directly or indirectly for commercialization or any other direct for-profit purpose without the prior written permission of UND.
- **5. Publication Requirements:** Those seeking to include renderings of more than 10 images from the MPM dataset in reports, papers, and other documents to be published or released must first obtain approval in writing from the UND Principal Investigator. In no case should the images be used in a way that could cause the original subject embarrassment or mental anguish.
- **6.** Citation: All documents and papers that report on research that uses the MPM dataset must acknowledge the use and source of the dataset by using the following citation:

J. Speth, N. Vance, P. Flynn, K. Bowyer and A. Czajka, "Remote Pulse Estimation in the Presence of Face Masks," 2022 IEEE/CVF Conference on Computer Vision and Pattern Recognition Workshops (CVPRW), New Orleans, LA, USA, 2022, pp. 2085–2094, doi: 10.1109/CVPRW56347.2022.00226.

- **7. Publications to UND:** A copy of all reports and papers that are for public or general release that use the MPM dataset must be forwarded immediately upon release or publication to the UND Principal Investigator.
- 8. Indemnification: Researcher agrees to indemnify, defend, and hold harmless the University of Notre Dame du Lac and its Board of Trustees, officers, employees and agents, individually and collectively, from any and all losses, expenses, damages, demands and/or claims based upon any such injury or damage (real or alleged) except to the extent permitted by law, when caused by the gross negligence or willful misconduct of UND, and shall pay all damages, claims, judgments or expenses resulting from Researcher's use of the MPM dataset, as determined by the court.

NAME (in capitals)	SIGNATURE	DATE
ORGANIZATION AND ADDRESS (in capitals)		

NAME OF RESEARCHER

Please scan and email the executed agreement to cvrl@nd.edu.