NISTIR 8280

Ongoing Face Recognition Vendor Test (FRVT)

Part 3: Demographic Effects

Annex 3 : Description and examples of images and metadata: Visa portraits

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Figure 1: The figure gives simulated examples of the visa photographs used in this report.

1 Visa photos

This annex documents the visa images used in this report

- Demographic composition: A global population from more than 100 countries involved in immigrant and non-immigrant application processes. The images are of subjects of all ages, including children and infants, with imbalance due to visa issuance demand.
- Capture standards: The images are collected in association with a visa application. Many of the images are live capture. A substantial number of the images are photographs of paper photographs. This reduces resolution compared to live capture directly from a subject. The images are in close compliance with the ISO/IEC 39794-5 specifications, except that they are cropped close to the chin. We determined this by visual inspection, for via application of automated quality or conformance tests. Pose is generally excellent.

The images are of size 252x300 pixels. The mean interocular distance (IOD) is 69 pixels.

The images are all high-quality frontal portraits collected in immigration offices. All images have a white background and are in close approximation to ISO/IEC 39794-5 / ICAO specifications. As such, potential quality related drivers of high false match rates (such as blur) can be expected to be absent.

- ▷ Encoding: The images are encoded as ISO/IEC 10918 i.e. JPEG.
- ▷ **Compression**: The mean file size is 31KB. The implied bit-rates are somewhat superior to many e-Passports.
- ▷ **Example images**: The image shown in Figure 1 is representative of images in the actual set.