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**NATIONAL STANDARD OF THE
PEOPLE'S REPUBLIC OF CHINA**

GB/T 45123-2024

**Public security - Biometric recognition application - Database
requirements for testing and evaluating algorithm**

公共安全 生物特征识别应用 算法评测数据库要求

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Foreword

This document is in accordance with the provisions of GB/T 1.1-2020 "Guidelines for standardization work Part

1. Structure and drafting rules for standardization documents" Drafting. Please note that some of the contents of this document may involve patents. The issuing organization of this document does not assume the responsibility for identifying patents. This document is issued by the Ministry of Public Security of the People's Republic of China. This document is under the jurisdiction of the National Security Alarm System Standardization Technical

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Evaluation of public security biometric recognition application algorithms Database requirements

1 Scope

GB/T 45123-2024 sets the requirements for the databases used to test and evaluate biometric recognition algorithms in public security applications. An algorithm's reported accuracy is a statement about the test set as much as about the algorithm: a database whose subjects are demographically narrow, whose images are all captured under the same conditions, or which the vendor has seen before, produces figures that do not survive contact with operational data. The standard sets the basic requirements for building an evaluation database, the categories of database - verification, identification and watchlist identification - and the construction elements, given generally and then specifically for face, fingerprint, palmprint, iris and finger vein databases, covering subject composition, capture conditions, annotation, quality control and the protection of the personal information the database necessarily contains. It takes effect on 1 July 2025.

This document specifies the basic principles, categories, requirements, and methods for constructing a single-modal general algorithm evaluation database for public security biometrics applications. elements, content description and safety requirements. This document applies to the design, development, testing and acceptance of application systems based on biometric identification in the public security field.

2 Normative references

The contents of the following documents constitute the essential clauses of this document through normative references in this document. For referenced documents without a date, only the version corresponding to that date applies to this document; for referenced documents without a date, the latest version (including all amendments) applies to This document.

GB/T 29268.1 Information technology - Biometric recognition performance testing and reporting - Part

3 Terms and definitions

The terms and definitions defined in GB/T 41786-2022 and GB/T 29268.1 and the following apply to this document.

3.1 target set targetset A specific sample collection with clear personal identification information. [Source: GB/T 41786-2022, 3.1.13]

3.2 probeset A collection of biometric samples used for comparison.

Note. It is divided into target person detection set and non-target person detection set.

3.3 Target person detection set positiveprobeset The set of biometric samples present in the target set for comparison.

3.4 Non-target person detection set negativeprobeset A collection of biometric samples used for comparison that are not present in the target set.