

3.23 Fingervein recognition

Keywords

Fingervein recognition library

Key contact researcher(s)

Dr. Sébastien Marcel
marcel@idiap.ch
Tel.: +41 27 721 77 27

Technology Transfer Office

Dr. Florent Monay
Dr. Hugues Salamin
tto@idiap.ch
Tel.: +41 27 721 77 72

Corporate Sponsorship Program

See Section 4 of the present document

File reference & version number:

Software disclosure 10264

Functional description

This library is designed to perform a fair comparison of finger vein recognition algorithms.

Innovative aspects

The library contains interfaces to publicly available fingervein image databases, and default evaluation protocols. Default implementations of vein recognition algorithms, which rely on BOB, are provided, e.g., for: Maximum Curvature, Repeated Line Tracking and Wide Line Detector.

Commercial application examples

- Biometrics-enabled identity management systems (Automated Border Control, Access Control, ...)
- Multi-factor authentication security systems (Critical Infrastructures, e-Banking, ...)

More information

P. Tome, M. Vanoni and S. Marcel: “On the Vulnerability of Finger Vein Recognition to Spoofing”, IEEE International Conference of the Biometrics Special Interest Group (BIOSIG), 2012. <http://publications.idiap.ch/index.php/publications/show/2910>

Software & IPR status

Open sourced at <https://pypi.python.org/pypi/xbob.fingervein> but re-licensing possible for commercial purposes.