ANSI/NIST Fingerprint Standard Workshop

Identification Flats

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Flats Standard

Reduce fingerprint capture failures by adopting a simpler capture process

- What are Identification Flats?
- N-FACS Study Results
- Flats Standard Requirements
  - Tall Platen
  - Segmentation
  - Image Quality Scores
- Los Angles Study on Latent Searching

Identification Flats

Sequence Flats

Sequence Flats

N-FACS Results

	Segmented Seq. Flats	Cross Match 2”	Heimann LS2 3”	Rolled Ink	Livescan Rolled
Dual Sub		94.3%	97.6%	93.8%	
Flats only		95.9%	97.7%		
Ohio Idents		94.5%	96.7%		
ODRC		96.1%	98.3%		98.5%
Seg Vendor A	65.4%				95.9%
Seg Vendor B	78.9%				97.0%

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Tall Platen

- Simple robust capture protocol
- Reduced training requirement
- Better finger registration/quality
- No finger sequence errors
- No rotation/ More reliable segmentation
- 2.25 mega pixels

Faster, Easier, more Accurate

Type-14 Image Record

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IQM=4

IQM=5

IQM=5

IQM=5

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Los Angles Study

Candidate List for 1805 Ident Searches

10/12/2003 - 5/27/2004

Currently about 2% of the records are composite

(3rd set is 'best' images)

About 92% of the records include flats

Rolls Candidate List

Candidate	Score
002357	1705
102588	1633
107843	1403
045512	1145
310492	1022
202301	917
110235	902

Rolls + Flats + Recidivist

Candidate		Score
F	002357	1989
R	002357	1705
R	107843	1603
R	002357	1571
F	002357	1379
F	002357	1246
R	002357	1238

Ident Candidates

Candidates	1	2	3	4	5	6
Searches	646	797	110	123	51	78

2.1 ident candidates per search on average

Ident Candidates

Flats only	224	12.4%
Rolls only	502	27.8%
Both	1079	59.8%
Total	1805	100%