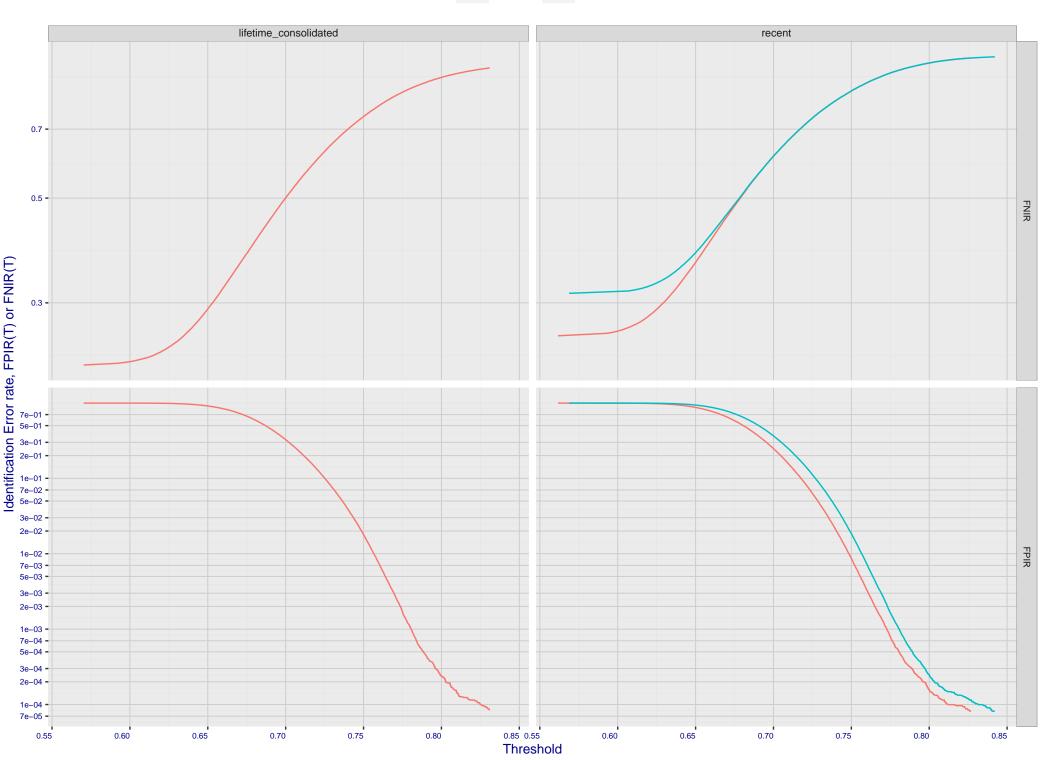
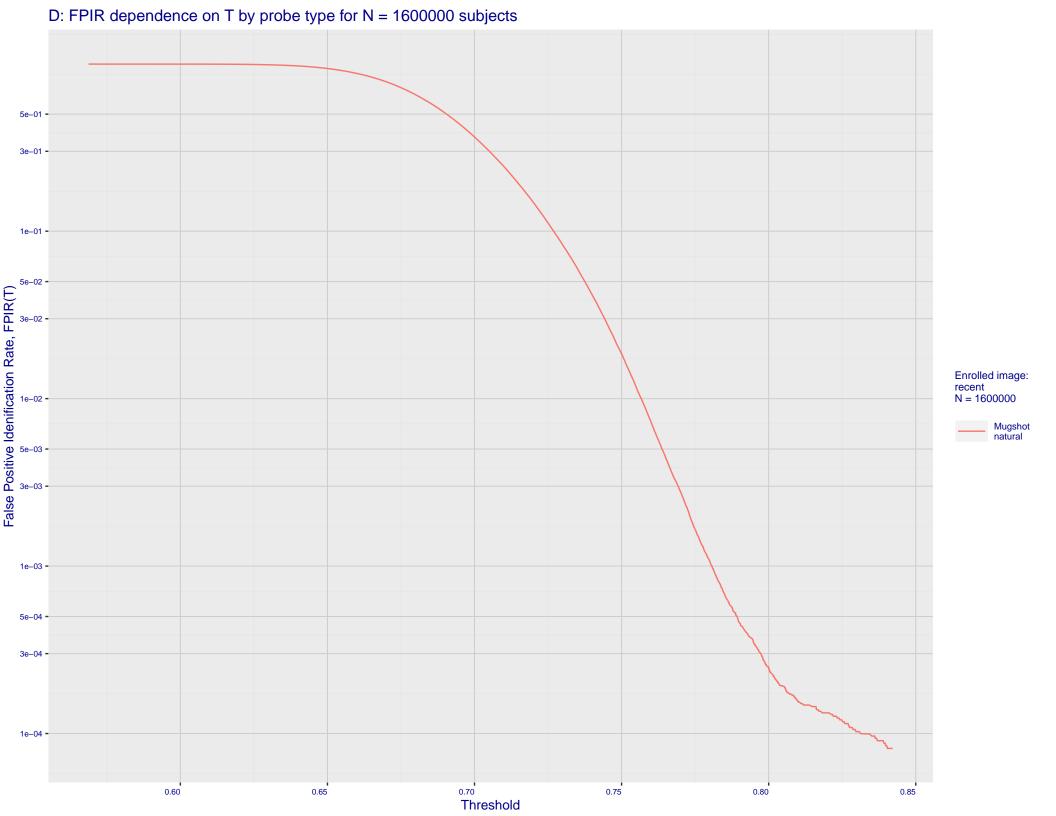
A: 1:N error tradeoff by dataset and enrollment type. N = 1600000 individuals Immigration Immigration Mugshot visa-border visa-kiosk natural False negative identification rate, FNIR(T) enrolment_style random-ONE-MATE recent-ONE-MATE 1e-04 3e-04 1e-03 3e-03 1e-02 3e-02 1e-01 3e-01 1e+00 1e-04 3e-04 1e-03 3e-03 1e-02 3e-02 1e-01 3e-01 1e+00 1e-04 3e-04 1e-03 3e-03 1e-02 3e-02 1e-01 3e-01 1e+00 False positive identification rate, FPIR(T)

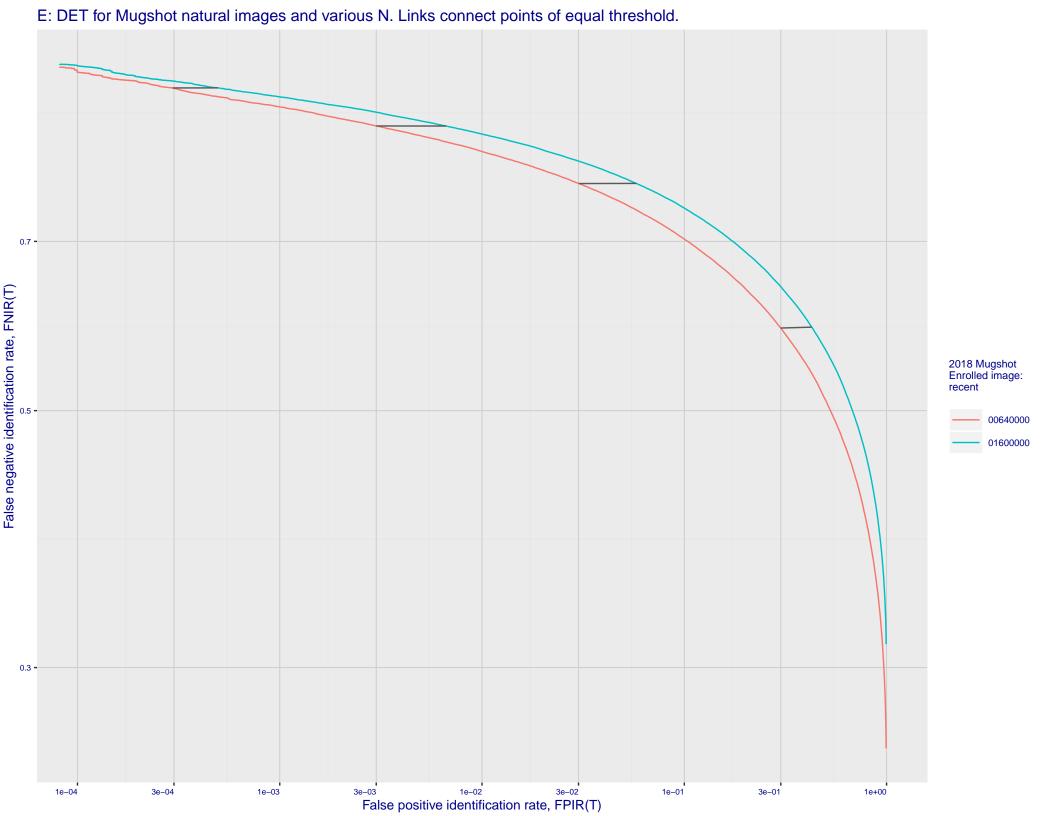
B: Dependence of error rates on T by number enrolled identities, N, for Mugshot natural images

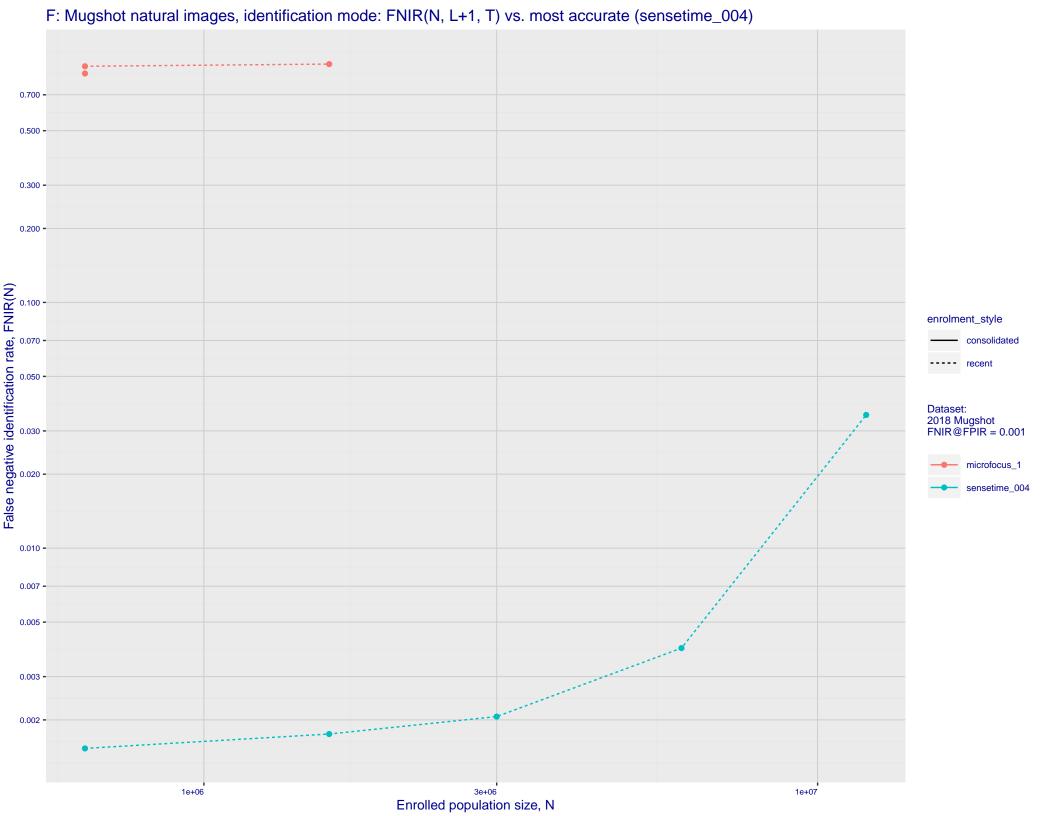




C: FPIR vs. Selectivity for mugshot images, N = 1600000 subjects enrolled with one recent mate 7e+01 5e+01 3e+01 2e+01 1e+01 7e+00 -5e+00 -3e+00 -2e+00 -1e+00 -7e-01 -5e-01 -Selectivity, SEL(T)
3e-01
Selectivity, SEL(T)
1e-01
7e-02 Enrolled images: recent N = 1600000 Mugshot natural 1e-01 -7e-02 -5e-02 -3e-02 -2e-02 -1e-02 -7e-03 -5e-03 -3e-03 2e-03 -1e-03 **-**7e-04 -5e-04 • 1e-04 3e-04 1e-03 1e-01 3e-01 False Positive Idenification Rate, FPIR(T)







G: Datasheet

Algorithm: microfocus_1

Developer: MicroFocus

Submission Date: 2018_02_16

Template size: 256 bytes

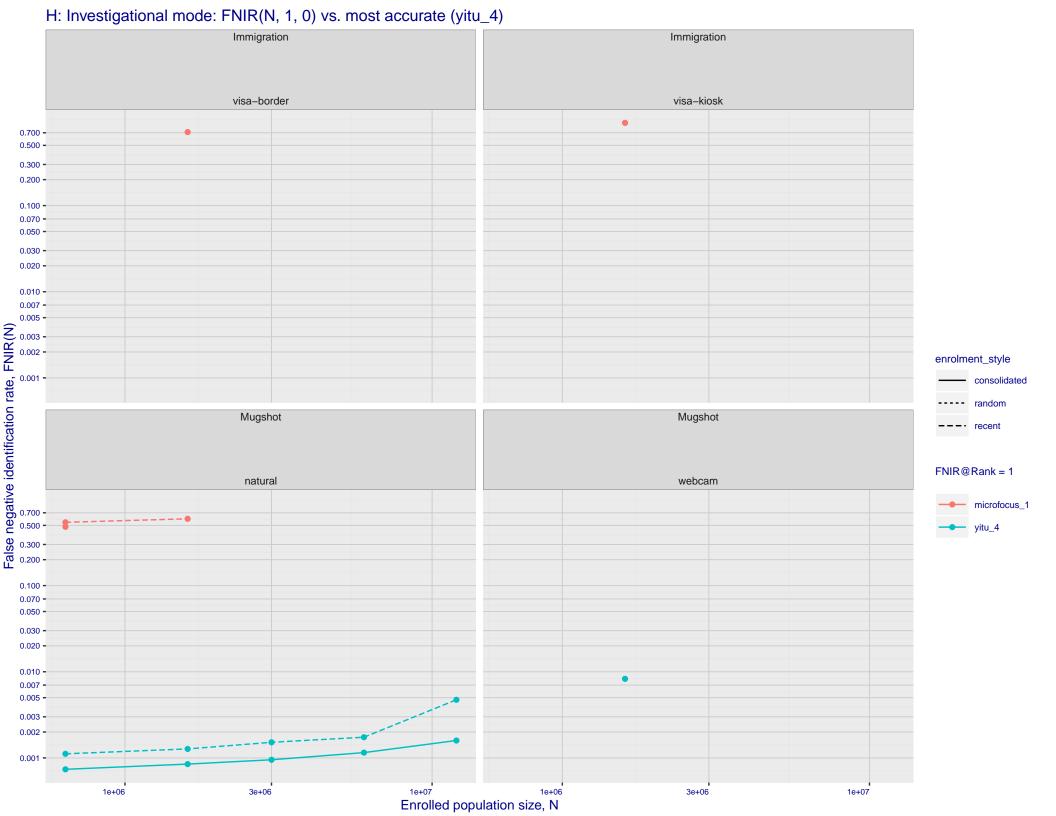
Template time (2.5 percentile): 419 msec

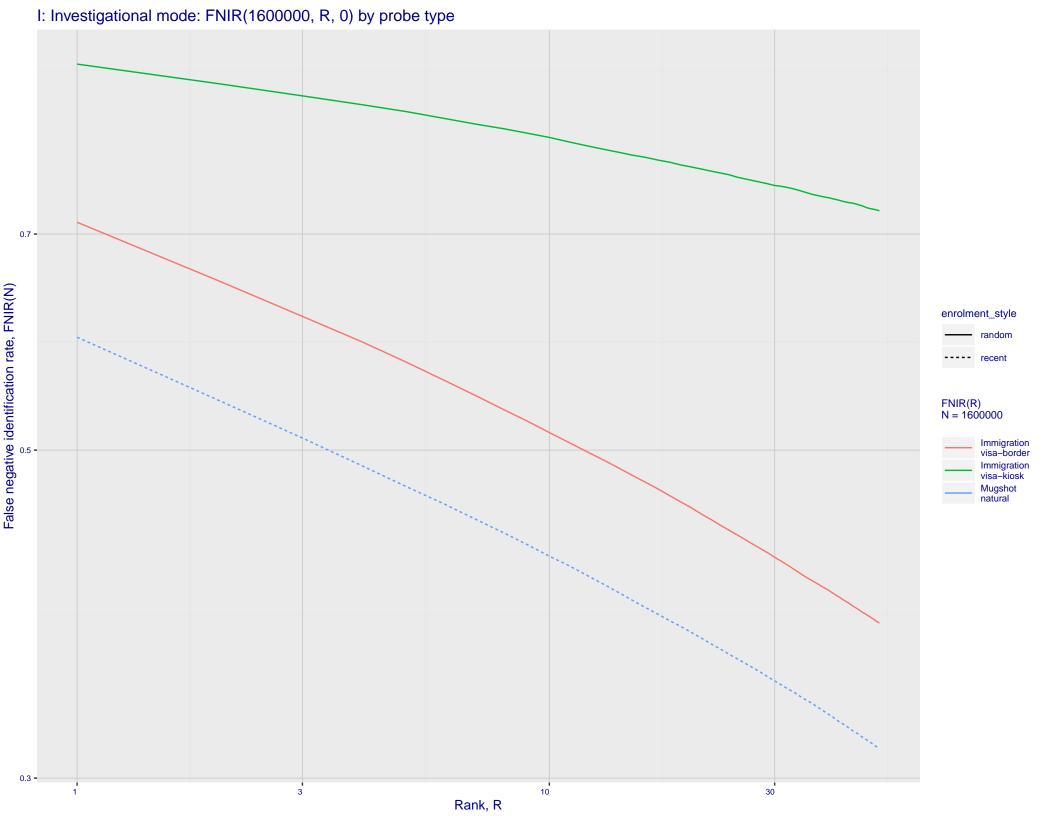
Template time (median): 530 msec

Template time (97.5 percentile): 634 msec

Frontal mugshot investigation rank 248 — FNIR(1600000, 0, 1) = 0.5961 vs. lowest 0.0010 from sensetime_004 natural investigation rank 96 — FNIR(1600000, 0, 1) = 0.7130 vs. lowest 0.0014 from visionlabs_009 natural investigation rank 98 — FNIR(1600000, 0, 1) = 0.9121 vs. lowest 0.0694 from cib_000

Frontal mugshot identification rank 238 — FNIR(1600000, T, L+1) = 0.9332 vs. lowest 0.0018 from sensetime_004 natural identification rank 92 — FNIR(1600000, T, L+1) = 0.9844 vs. lowest 0.0059 from sensetime_004 natural identification rank 78 — FNIR(1600000, T, L+1) = 0.9328 vs. lowest 0.1129 from visionlabs_009





Template duration; search duration vs. N. The blue and pink ribbon covers 95 percent of observed measurements. The template generation time is independent of N. The log and power–law models are fit to the first two (N,T) observations - Log Model ---- Power Law Model 500 300 -Search Duration (milliseconds) 30 -

Enrolled population size, N, one image per person

7e+05

8e+05