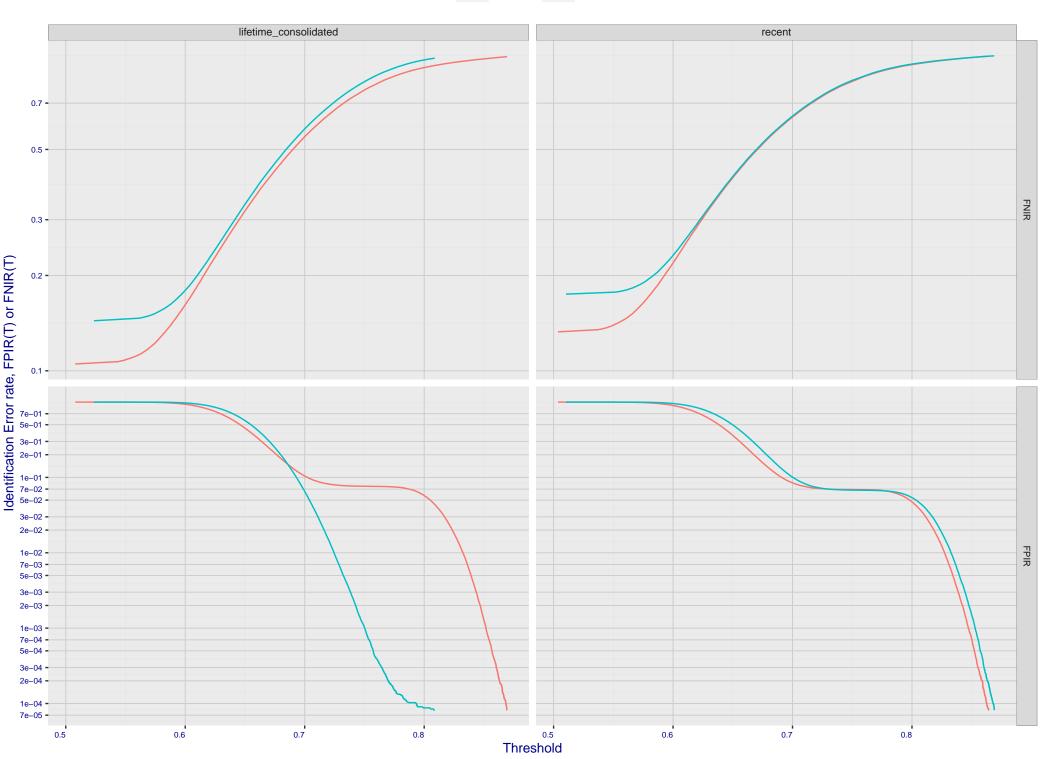
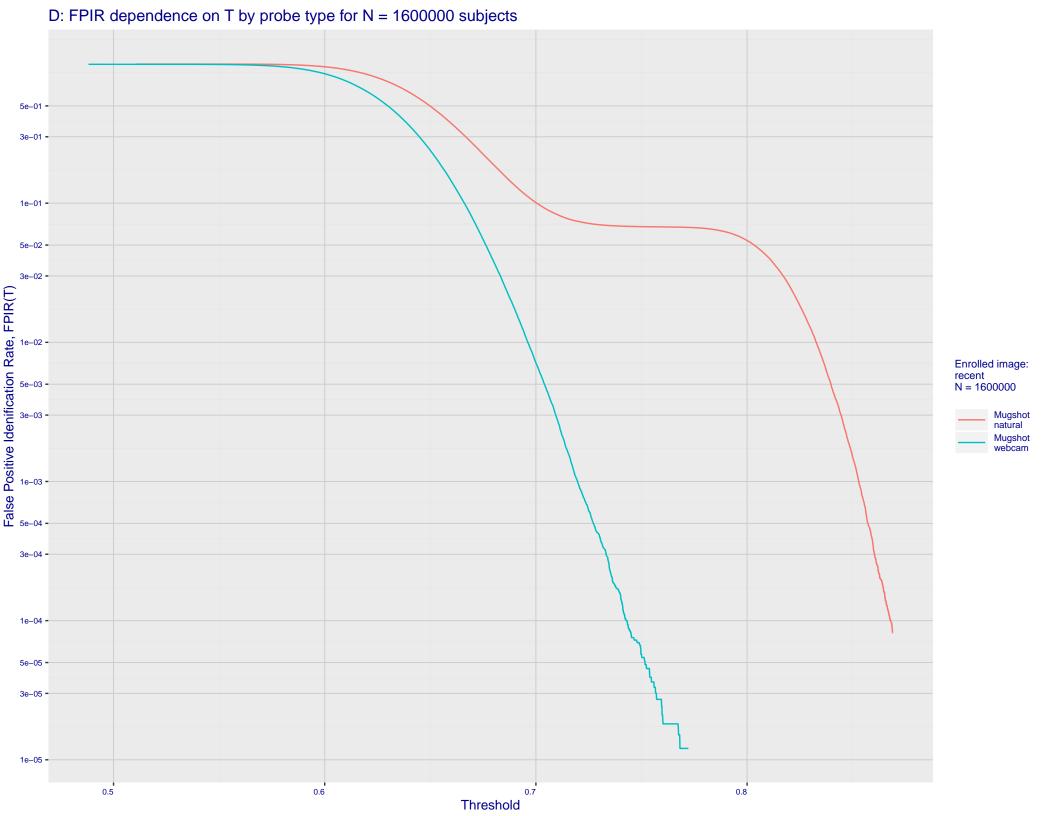
A: 1:N error tradeoff by dataset and enrollment type. N = 1600000 individuals Immigration Immigration Mugshot visa-border visa-kiosk natural 0.7 -False negative identification rate, FNIR(T) enrolment_style consolidated-ONE-MATE random-ONE-MATE recent-ONE-MATE unconsolidated-ALL-MATES unconsolidated-ANY-MATE 0.2 -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)

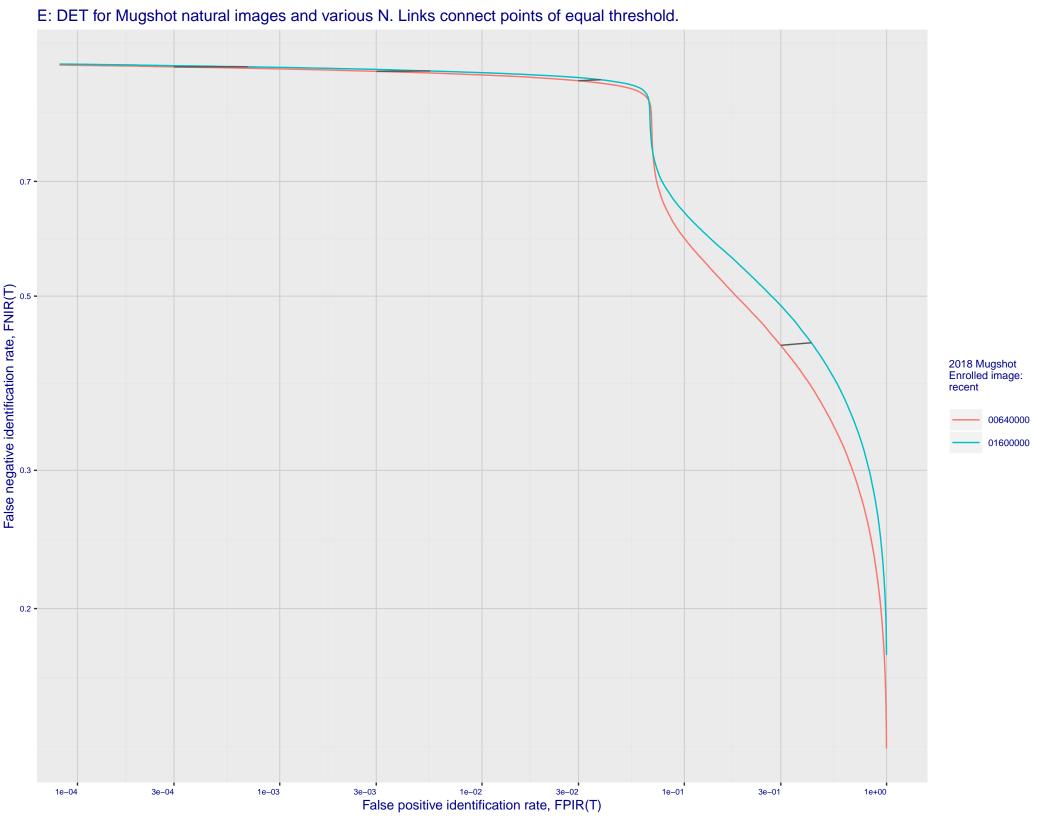
B: Dependence of error rates on T by number enrolled identities, N, for Mugshot natural images

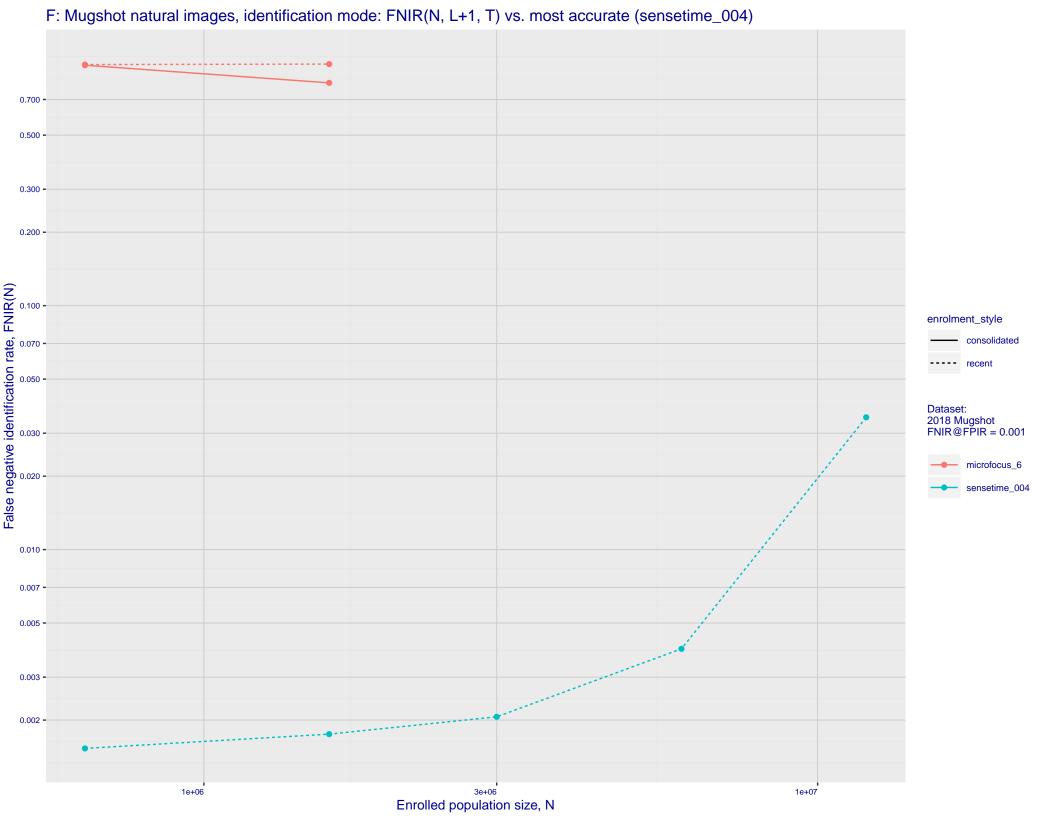




C: FPIR vs. Selectivity for mugshot images, N = 1600000 subjects enrolled with one recent mate 7e+01 5e+01 -3e+01 2e+01 -1e+01 -7e+00 -5e+00 -3e+00 -2e+00 -1e+00 -7e-01 -5e-01 -3e-01 -2e-01 -1e-01 -7e-02 - 7e-02 - 7e-03 Enrolled images: recent N = 1600000Mugshot natural Mugshot webcam 7e-03 -5e-03 -3e-03 -2e-03 -1e-03 -7e-04 -5e-04 -3e-04 -2e-04 -1e-04 **-**7e-05 -5e-05 -3e-05 -2e-05 -1e-05 -1e-05 3e-05 1e-04 3e-04 1e-01 3e-01 False Positive Idenification Rate, FPIR(T)







G: Datasheet

Algorithm: microfocus_6

Developer: MicroFocus

Submission Date: 2018_10_29

Template size: 256 bytes

Template time (2.5 percentile): 224 msec

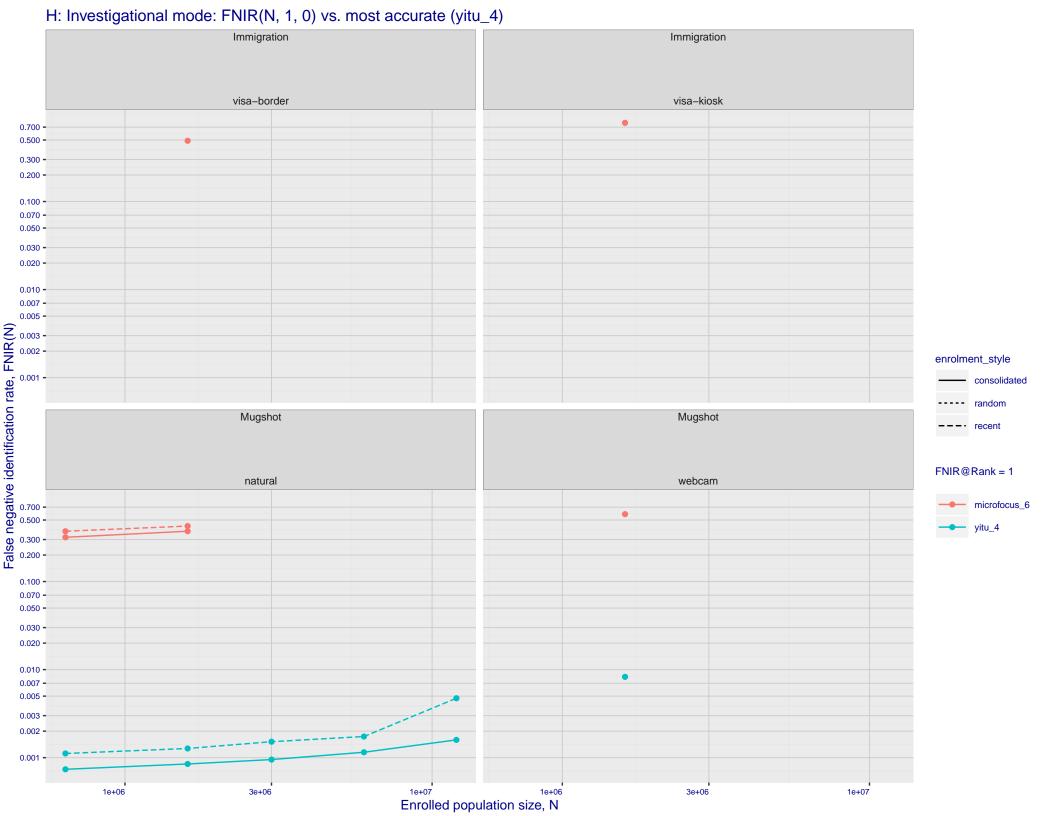
Template time (median): 263 msec

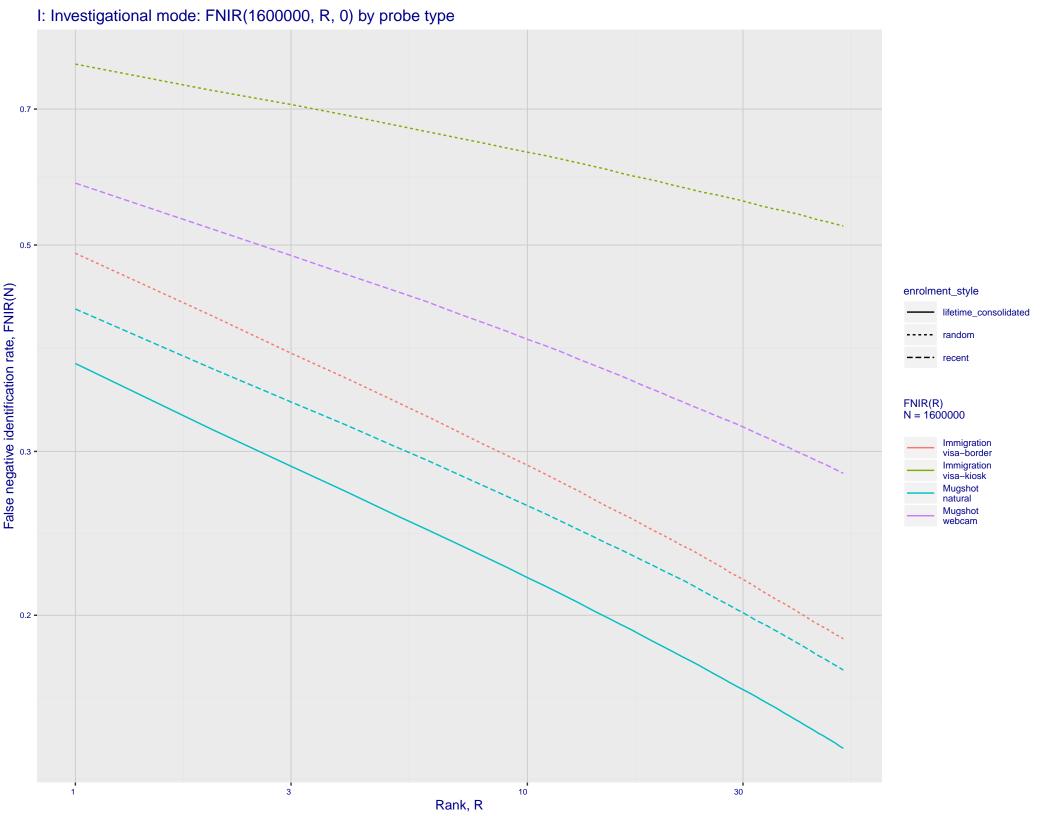
Template time (97.5 percentile): 312 msec

Frontal mugshot investigation rank 242 — FNIR(1600000, 0, 1) = 0.4268 vs. lowest 0.0010 from sensetime_004 natural investigation rank 205 — FNIR(1600000, 0, 1) = 0.5828 vs. lowest 0.0067 from sensetime_003 natural investigation rank 91 — FNIR(1600000, 0, 1) = 0.4899 vs. lowest 0.0014 from visionlabs_009 natural investigation rank 94 — FNIR(1600000, 0, 1) = 0.7825 vs. lowest 0.0694 from cib_000

Frontal mugshot identification rank 243 — FNIR(1600000, T, L+1) = 0.9779 vs. lowest 0.0018 from sensetime_004 natural identification rank 197 — FNIR(1600000, T, L+1) = 0.9232 vs. lowest 0.0122 from sensetime_003 natural identification rank 86 — FNIR(1600000, T, L+1) = 0.9235 vs. lowest 0.0059 from sensetime_004

natural identification rank 80 -- FNIR(1600000, T, L+1) = 0.9707 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 300 -200 100 7e+05 8e+05

Enrolled population size, N, one image per person

Search Duration (milliseconds)