A: 1:N error tradeoff by dataset and enrollment type. N = 1600000 individuals Mugshot natural 0.7 -0.5 -False negative identification rate, FNIR(T) enrolment_style recent-ONE-MATE 0.1 -

False positive identification rate, FPIR(T)

1e-01

3e-01

1e+00

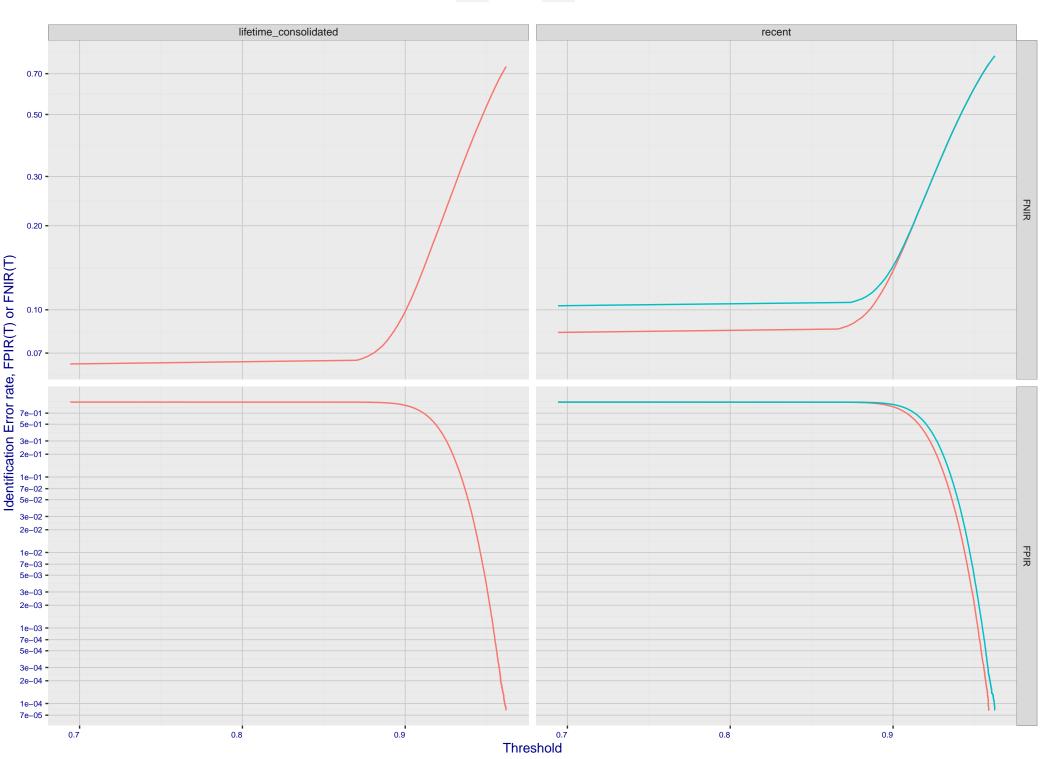
1e-03

1e-04

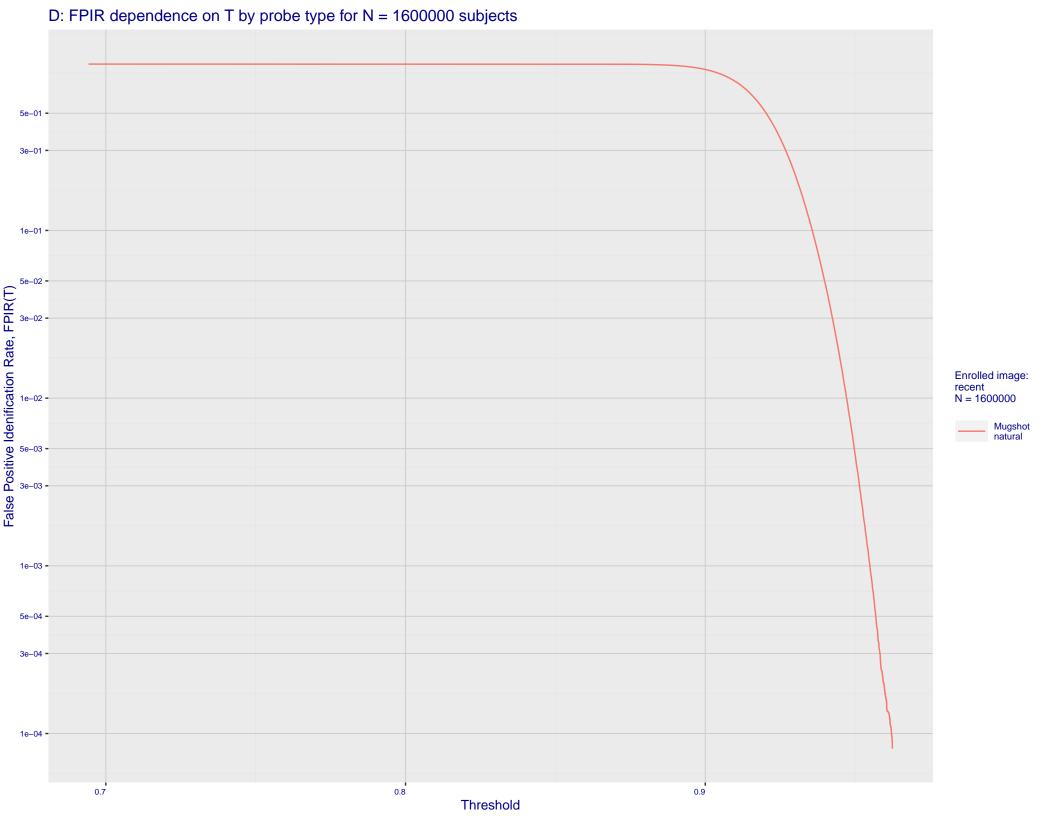
3e-04

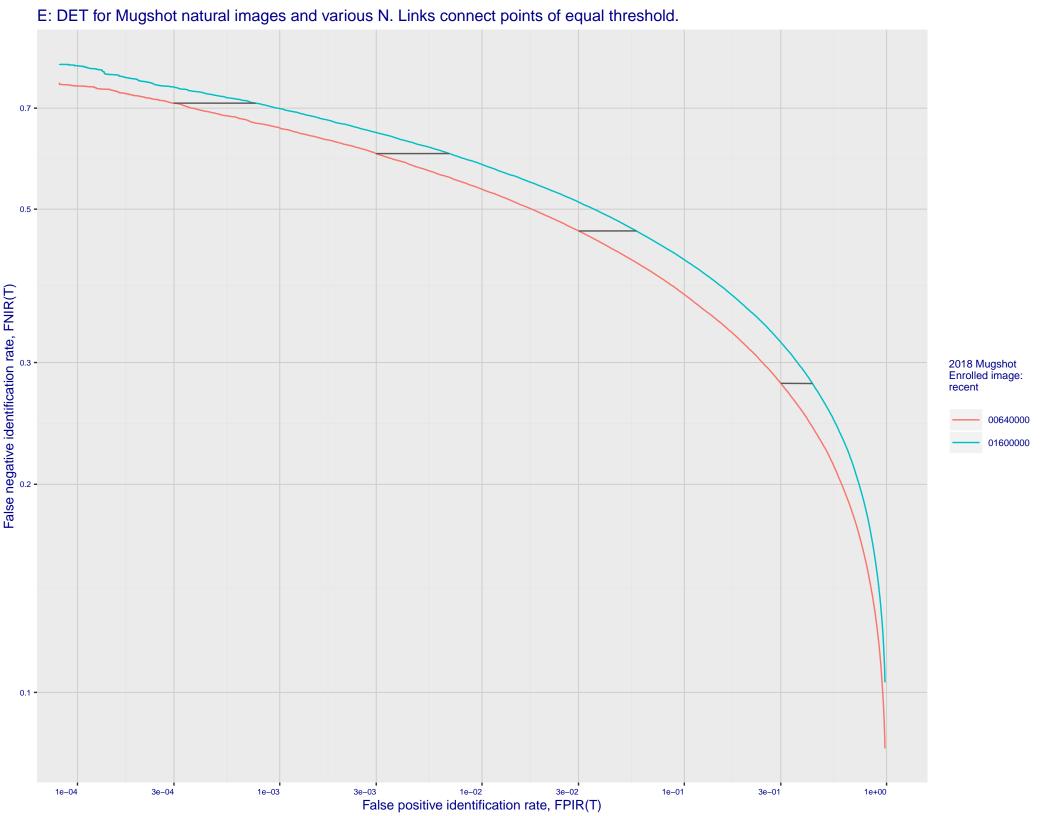
B: Dependence of error rates on T by number enrolled identities, N, for Mugshot natural images

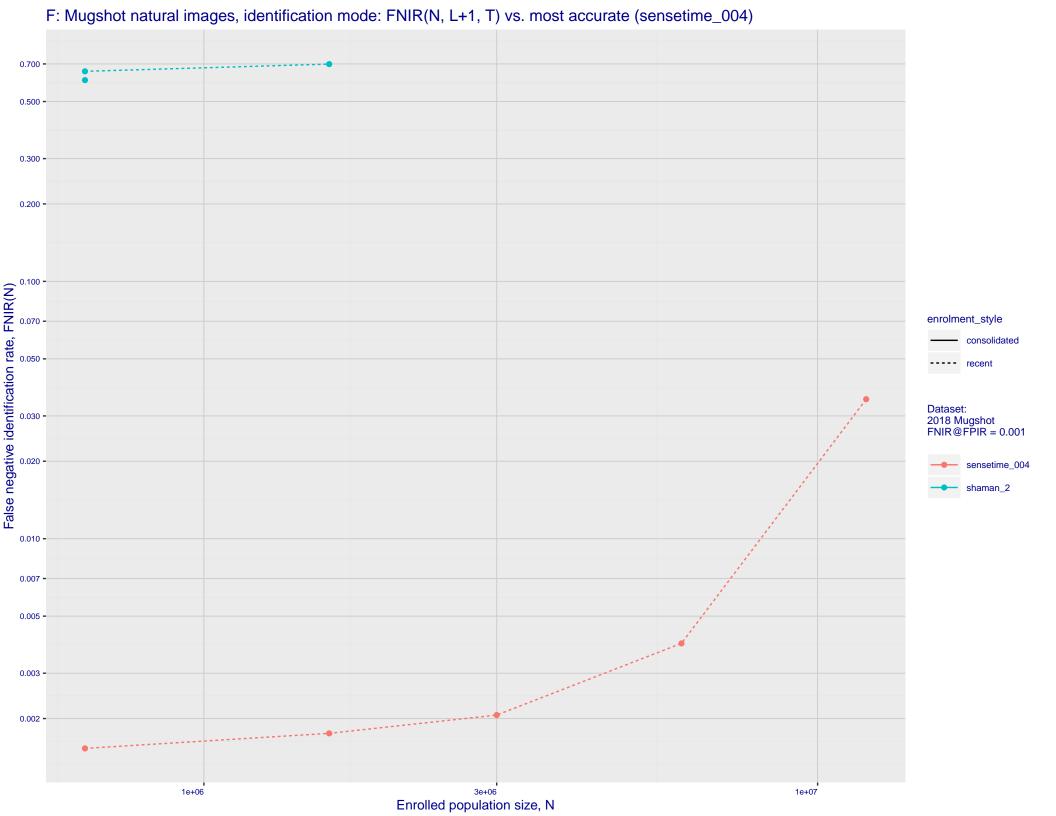




C: FPIR vs. Selectivity for mugshot images, N = 1600000 subjects enrolled with one recent mate 7e+01 5e+01 3e+01 2e+01 -1e+01 -7e+00 -5e+00 -3e+00 -2e+00 -1e+00 -7e-01 -5e-01 -3e-01 -2e-01 Enrolled images: recent N = 1600000 Mugshot natural 2e-02 1e-02 -7e-03 • 5e-03 **-**3e-03 -2e-03 -1e-03 7e-04 -5e-04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







G: Datasheet

Algorithm: shaman_2

Developer: Shaman Software Submission Date: 2018_02_12

Template size: 8192 bytes

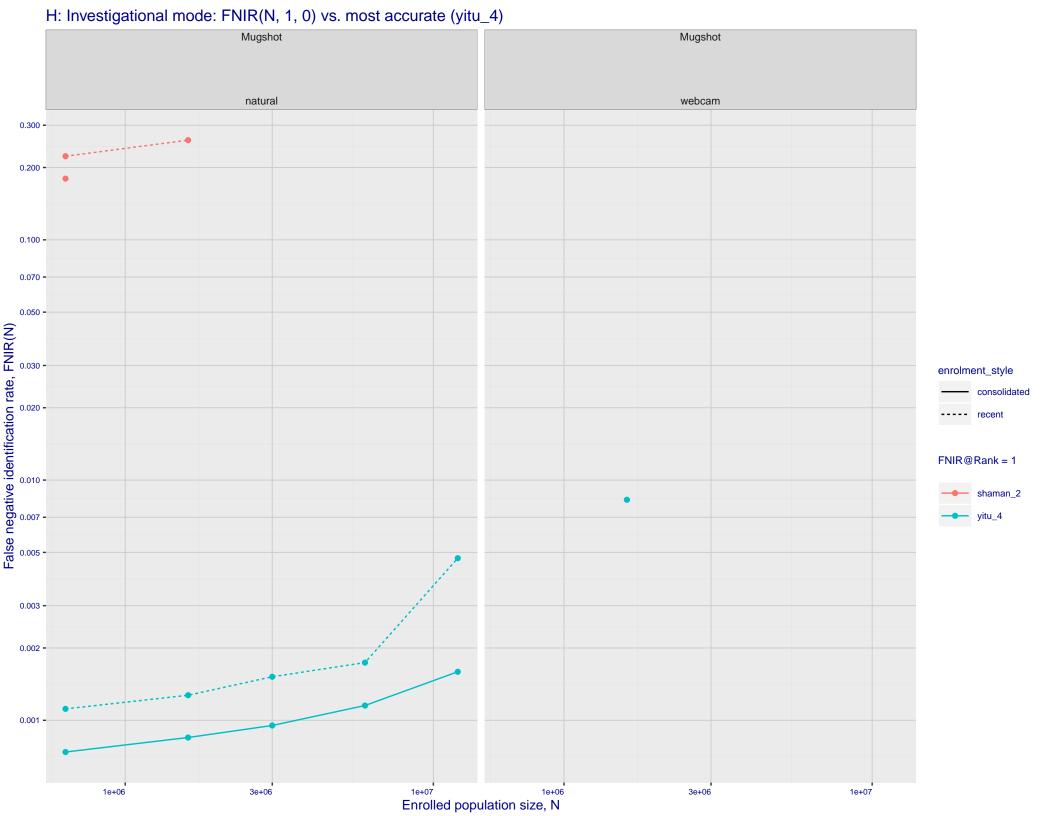
Template time (2.5 percentile): 562 msec

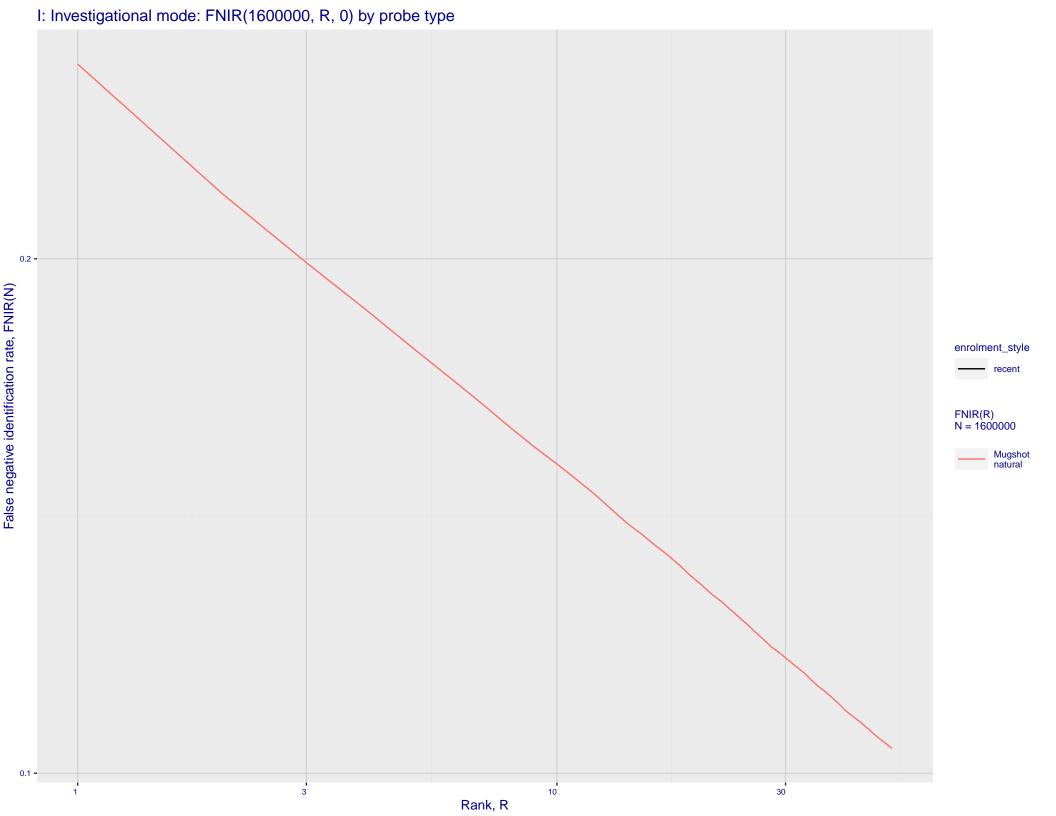
Template time (median): 565 msec

Template time (97.5 percentile): 585 msec

Frontal mugshot investigation rank 234 — FNIR(1600000, 0, 1) = 0.2600 vs. lowest 0.0010 from sensetime_004

Frontal mugshot identification rank 224 -- FNIR(1600000, T, L+1) = 0.6990 vs. lowest 0.0018 from sensetime_004





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

