A: 1:N error tradeoff by dataset and enrollment type. N = 1600000 individuals Mugshot natural 0.300 0.200 0.100 -False negative identification rate, FNIR(T) enrolment_style consolidated-ONE-MATE recent-ONE-MATE 0.010 -0.007 0.005 -0.003 -

False positive identification rate, FPIR(T)

1e-01

3e-01

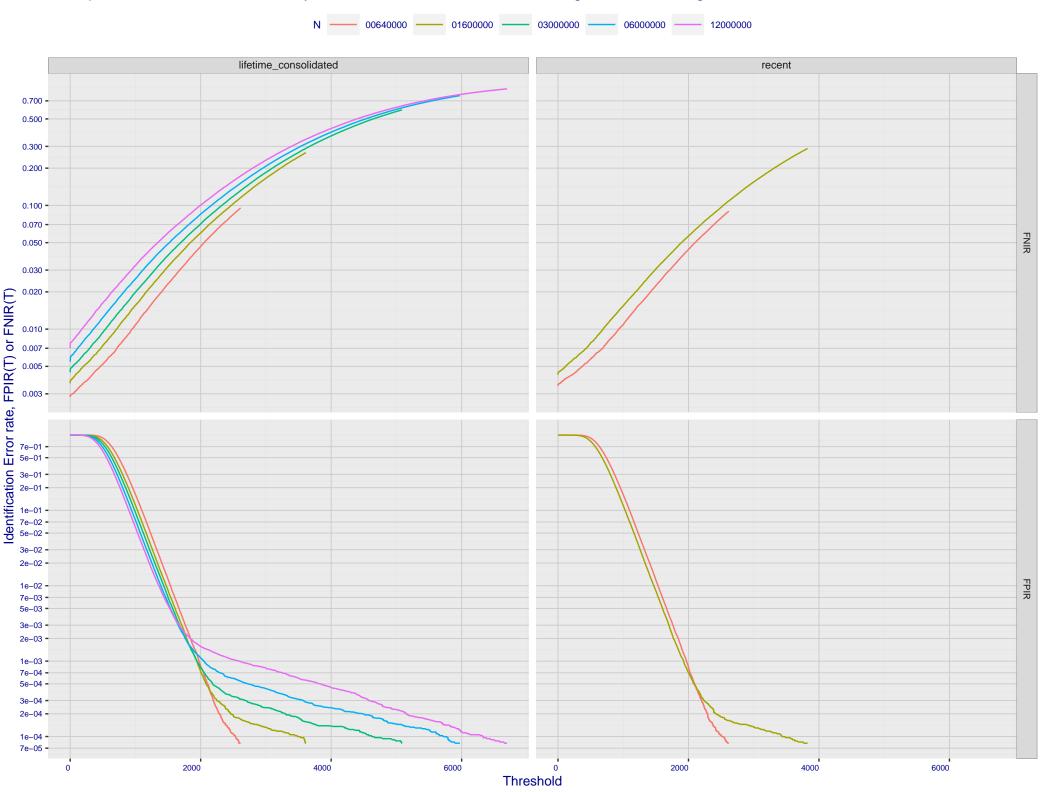
1e+00

3e-04

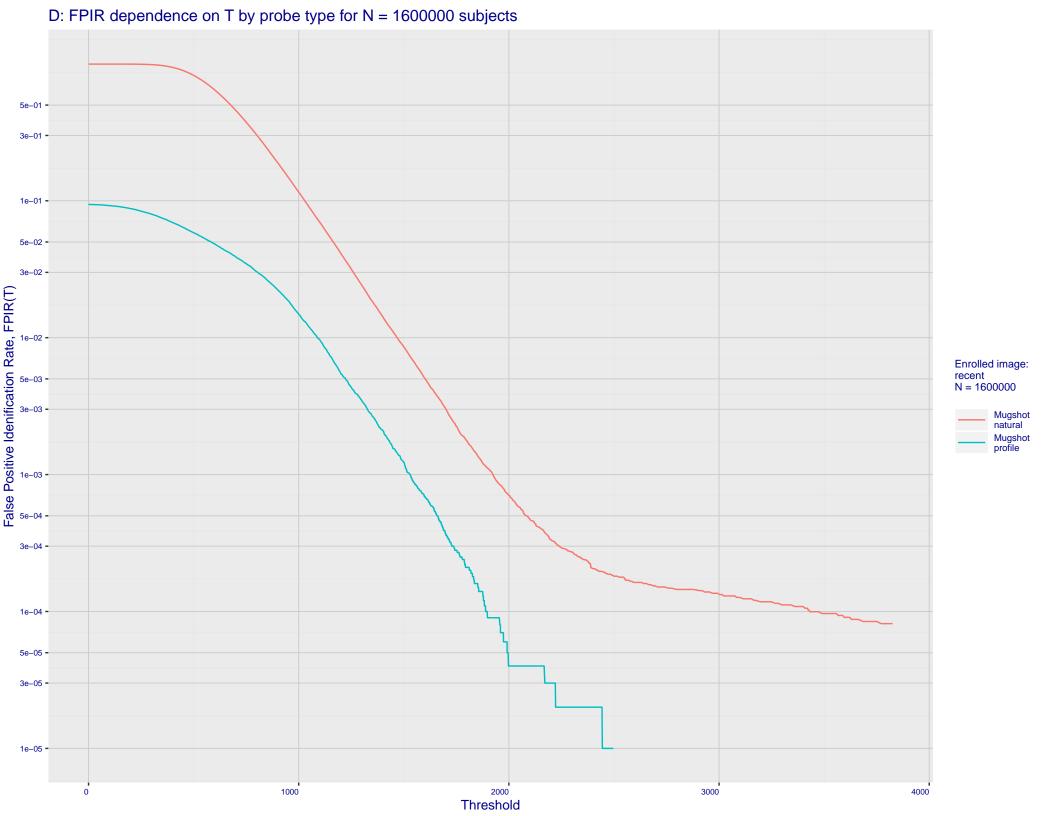
1e-04

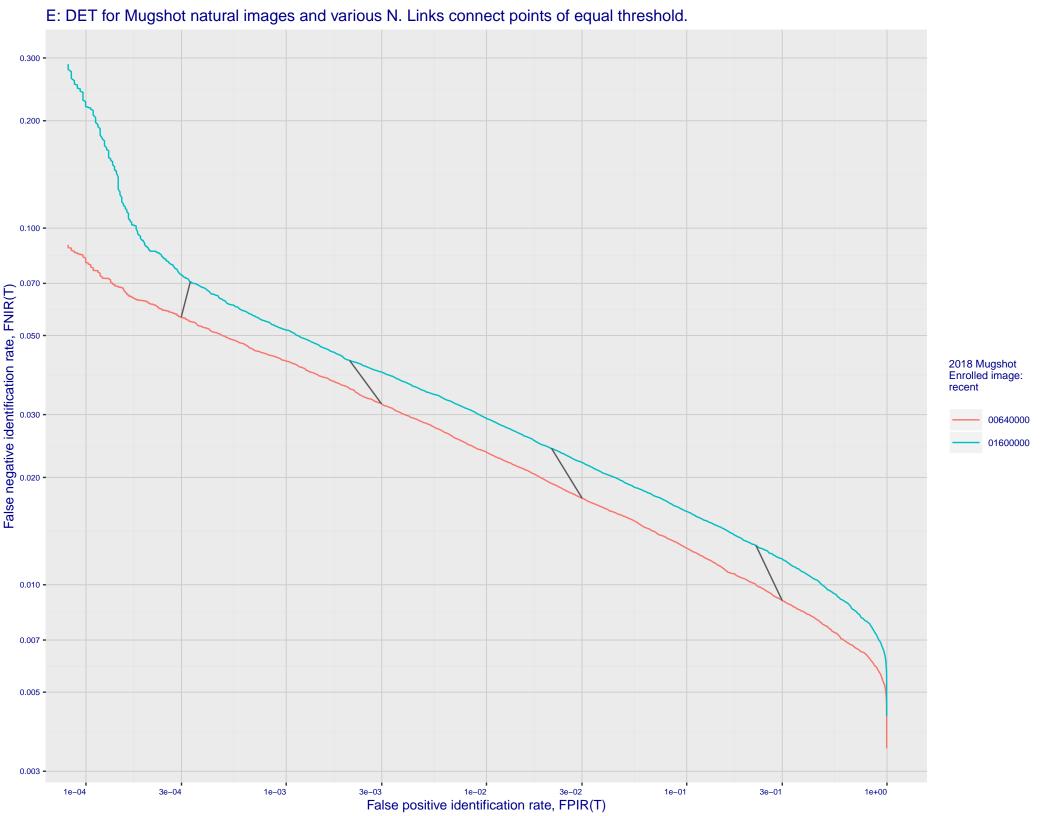
1e-03

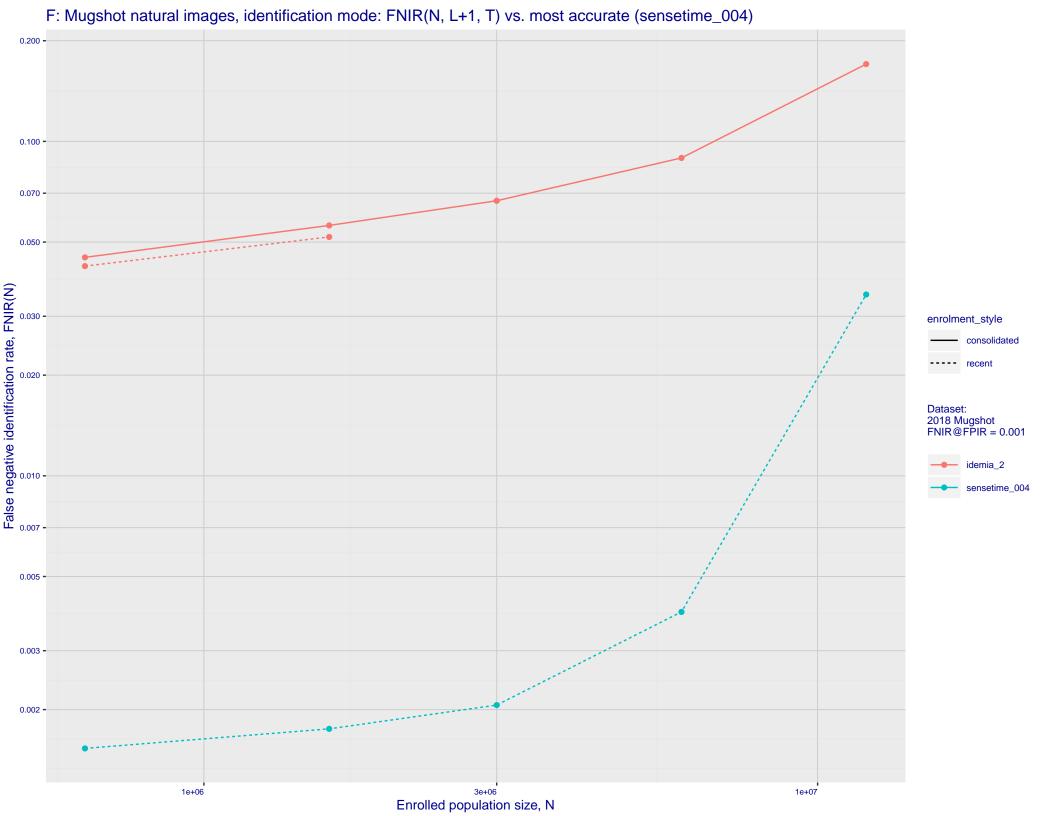
B: Dependence of error rates on T by number enrolled identities, N, for Mugshot natural images



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 -Enrolled images: recent N = 1600000Mugshot natural Mugshot profile 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 • 3e-03 1e-05 3e-05 1e-04 3e-04 1e-01 3e-01 False Positive Idenification Rate, FPIR(T)







G: Datasheet

Algorithm: idemia_2

Developer: Idemia

Submission Date: 2018_02_16

Template size: 364 bytes

Template time (2.5 percentile): 405 msec

Template time (median): 415 msec

Template time (97.5 percentile): 434 msec

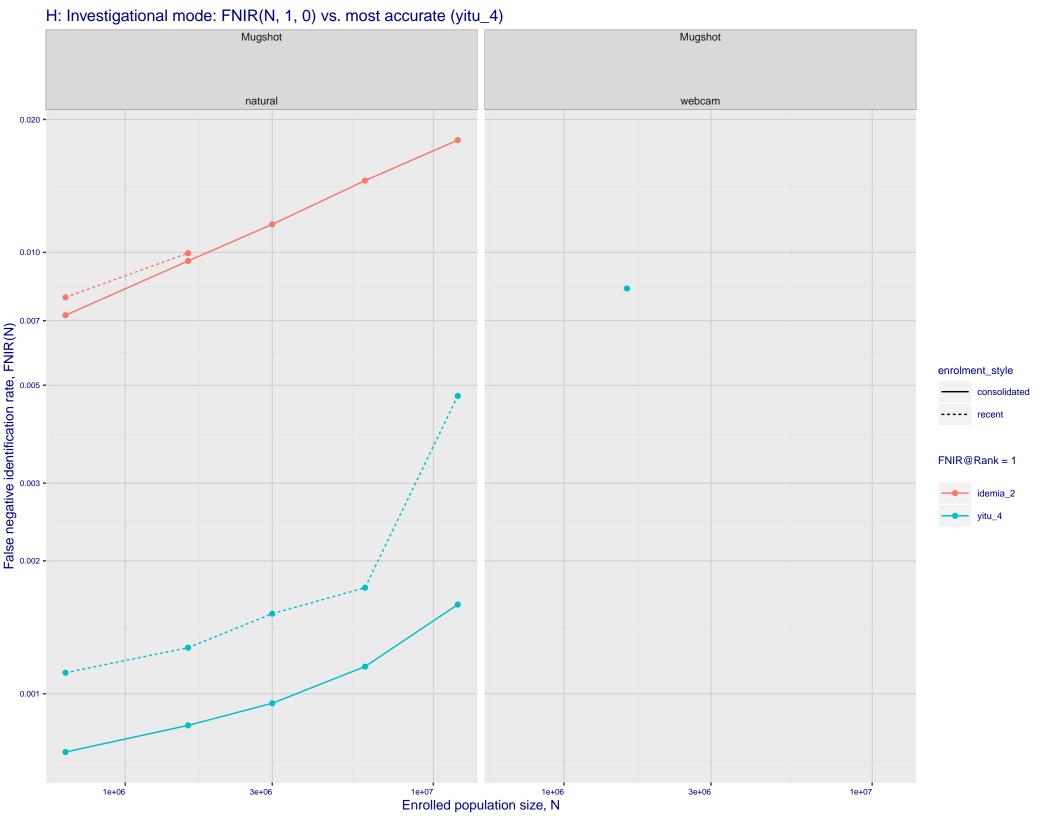
Frontal mugshot investigation rank 115 -- FNIR(1600000, 0, 1) = 0.0100 vs. lowest 0.0010 from sensetime_004

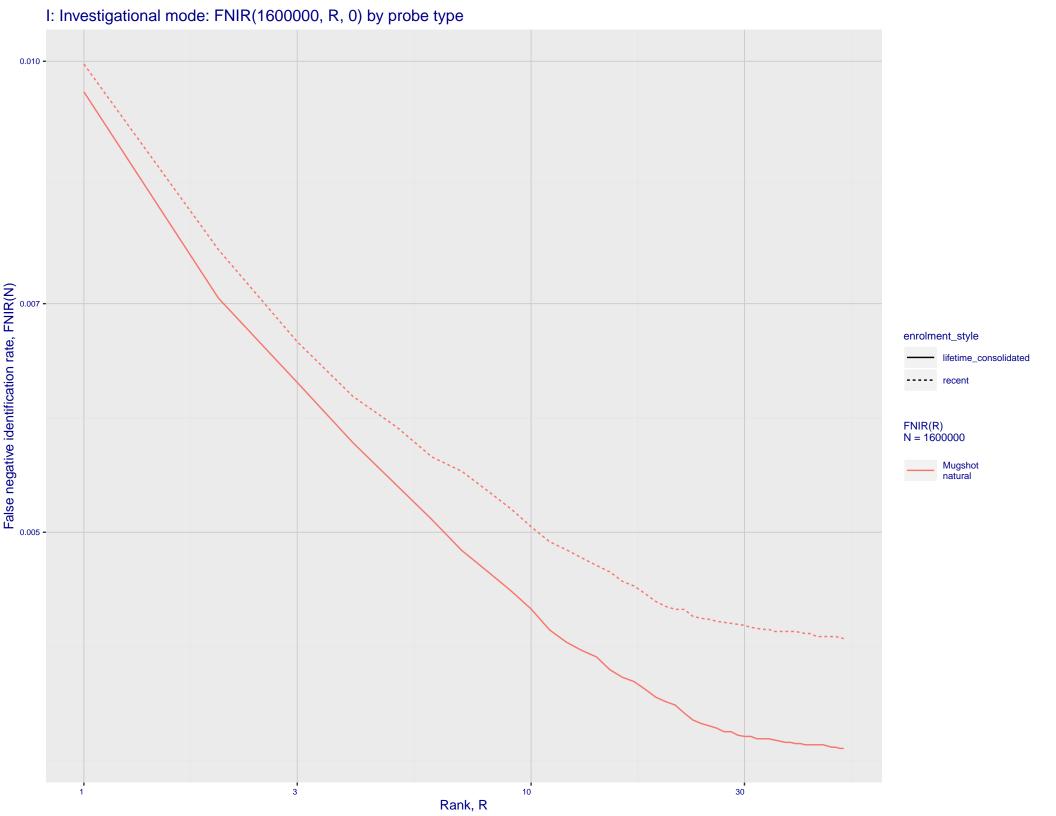
natural investigation rank 277 -- FNIR(1600000, 0, 1) = 0.9520 vs. lowest 0.0492 from paravision_005

natural investigation rank 277 -- FNIR(1600000, 0, 1) = 0.9520 vs. lowest 0.0492 from paravision_005

Frontal mugshot identification rank 74 -- FNIR(1600000, T, L+1) = 0.0518 vs. lowest 0.0018 from sensetime_004

natural identification rank 54 -- FNIR(1600000, T, L+1) = 0.9630 vs. lowest 0.1020 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

