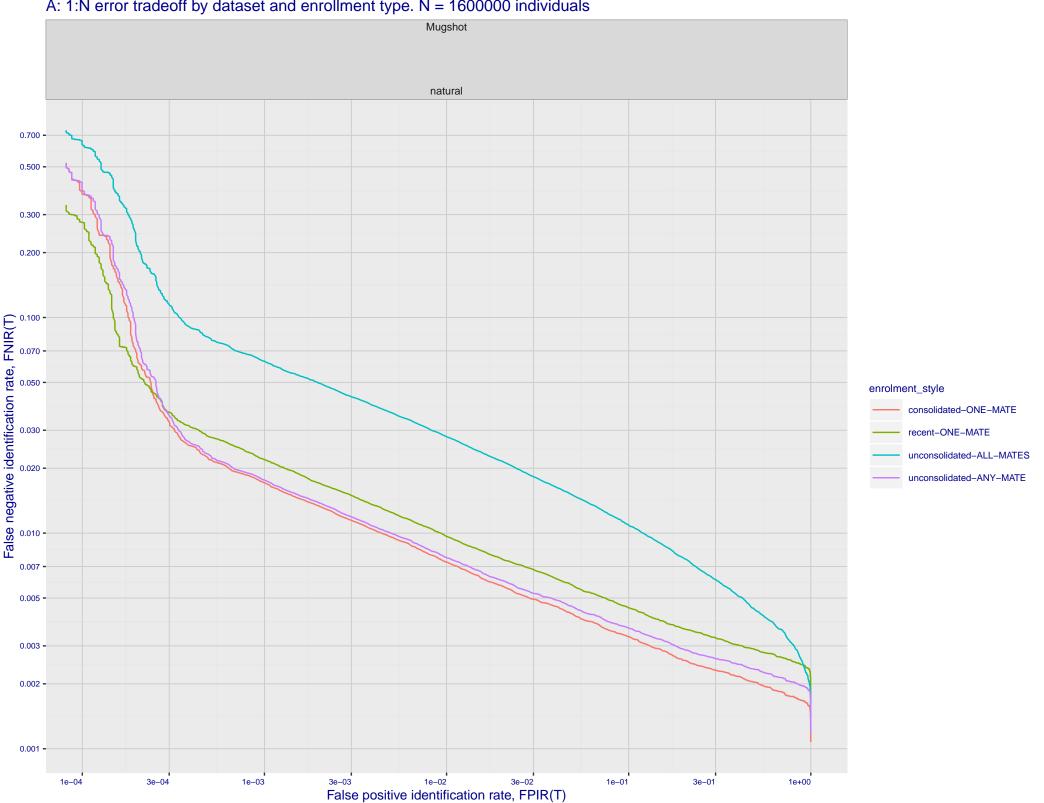
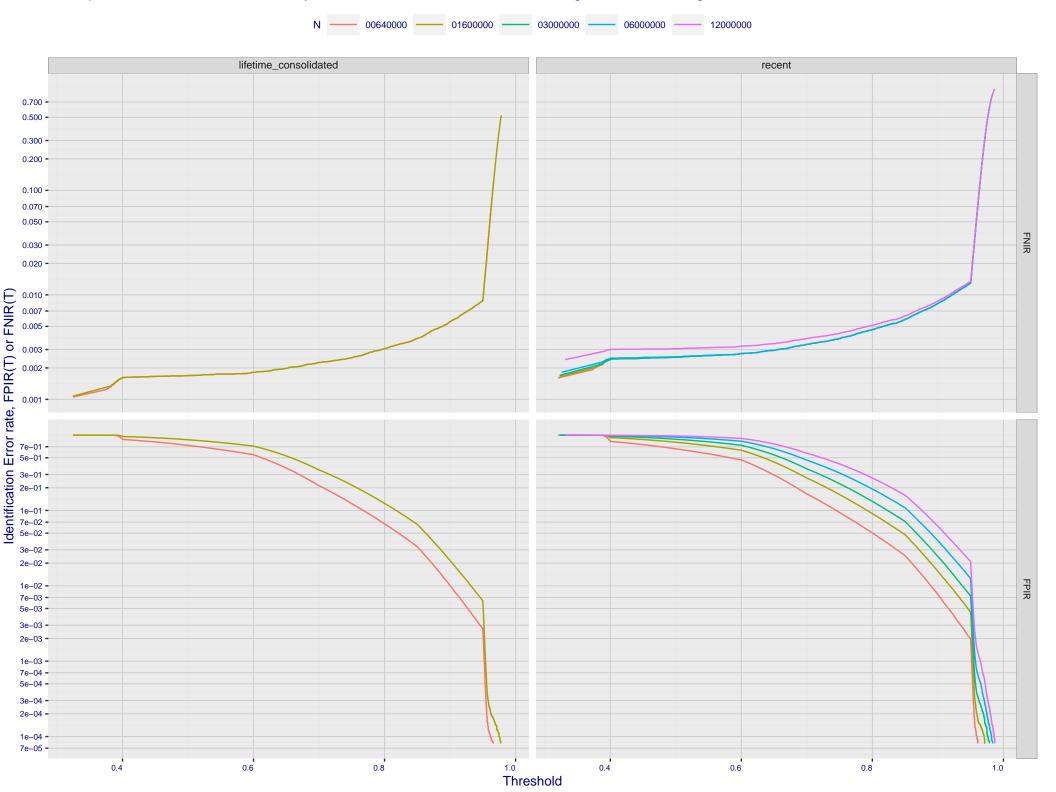
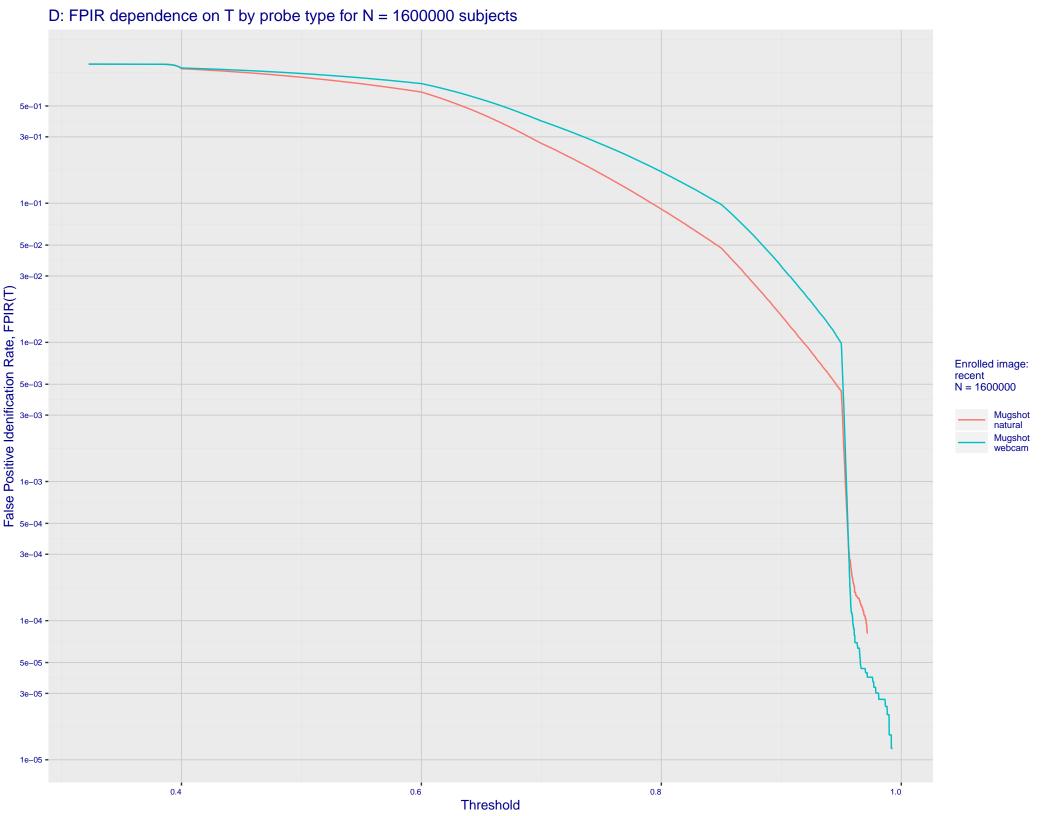
A: 1:N error tradeoff by dataset and enrollment type. N = 1600000 individuals

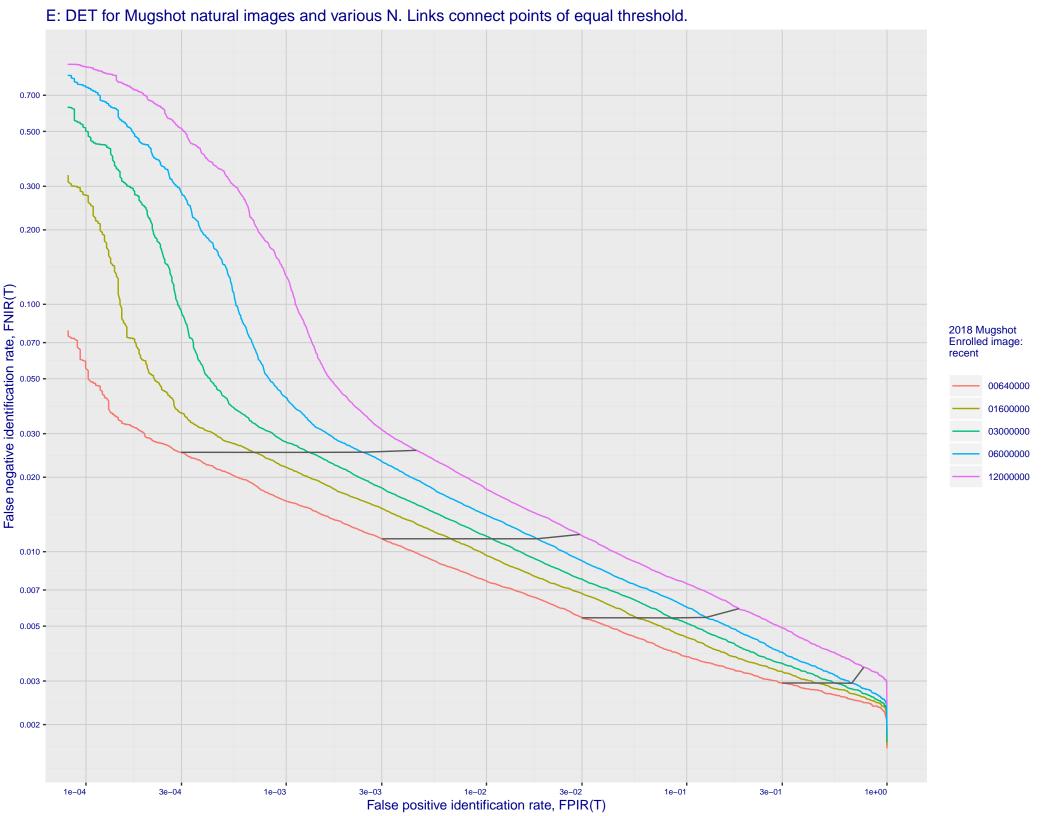


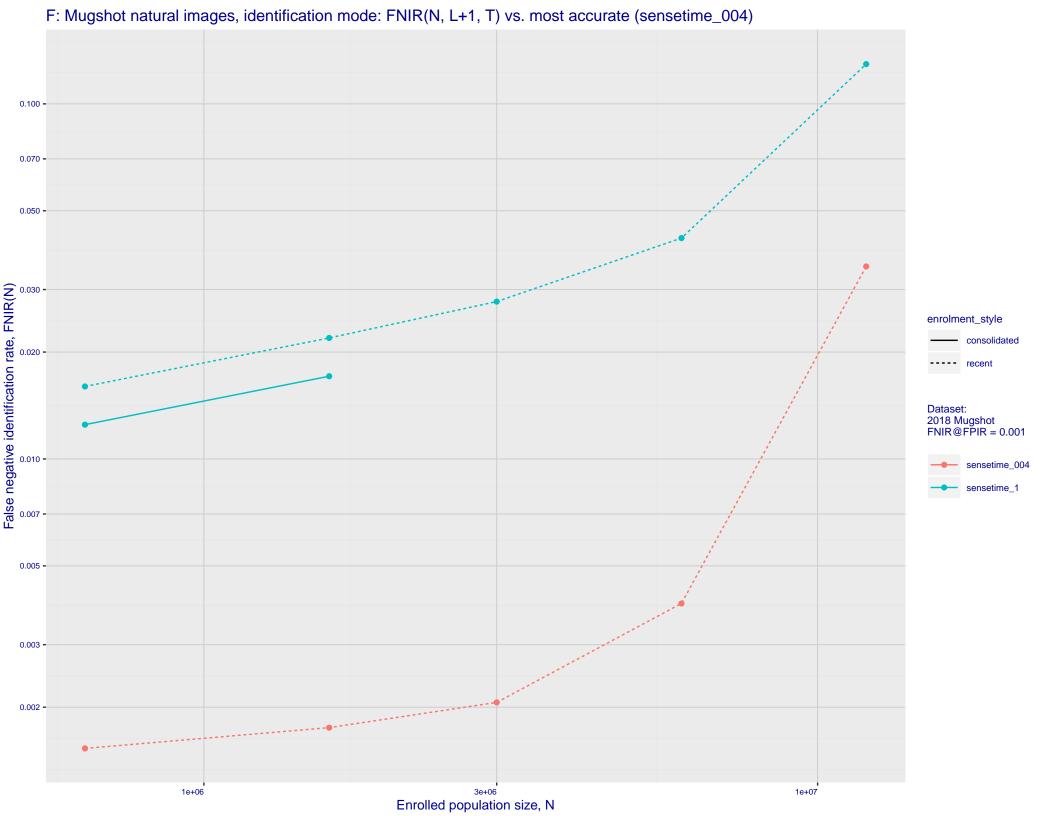
B: Dependence of error rates on T by number enrolled identities, N, for Mugshot natural images



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 - 5e-02 - 2e-02 - 1e-02 - 1e-02 -Enrolled images: recent N = 1600000Mugshot natural Mugshot webcam 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 -3e-05 -2e-05 -1e-05 3e-05 1e-04 3e-04 1e-01 3e-01 False Positive Idenification Rate, FPIR(T)







G: Datasheet

Algorithm: sensetime_1

Developer: Sensetime Group Submission Date: 2018_10_30

Template size: 4104 bytes

Template time (2.5 percentile): 627 msec

Template time (median): 628 msec

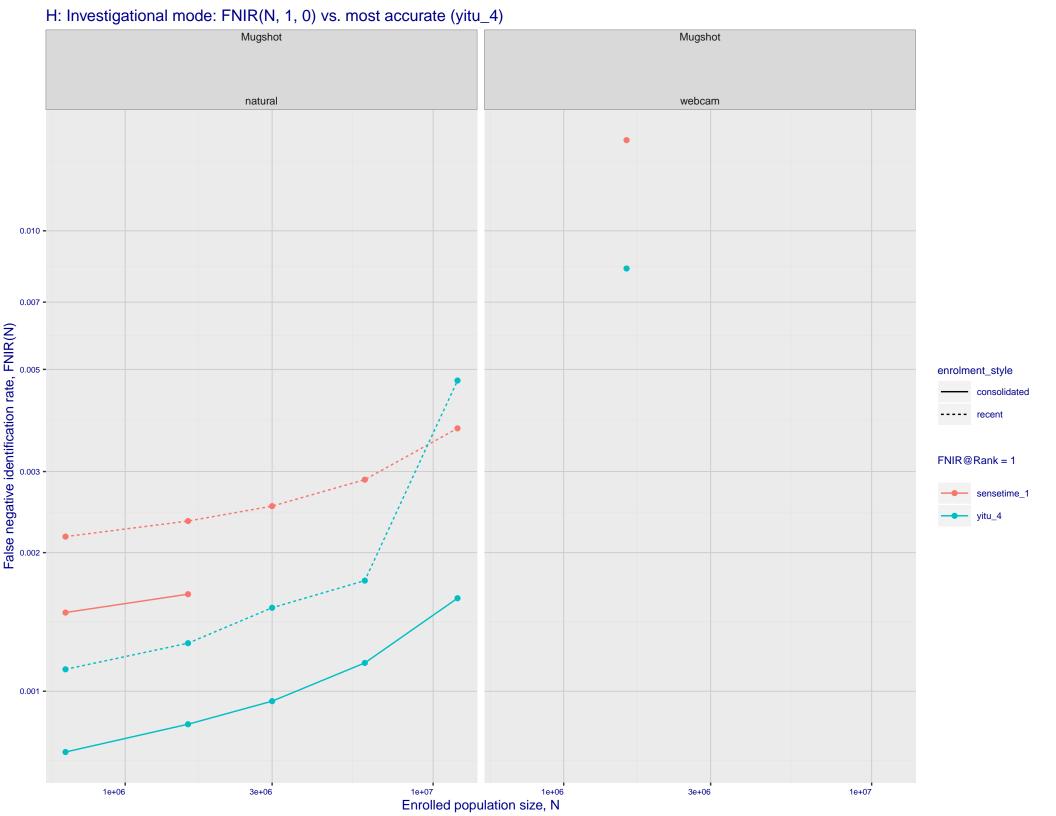
Template time (97.5 percentile): 810 msec

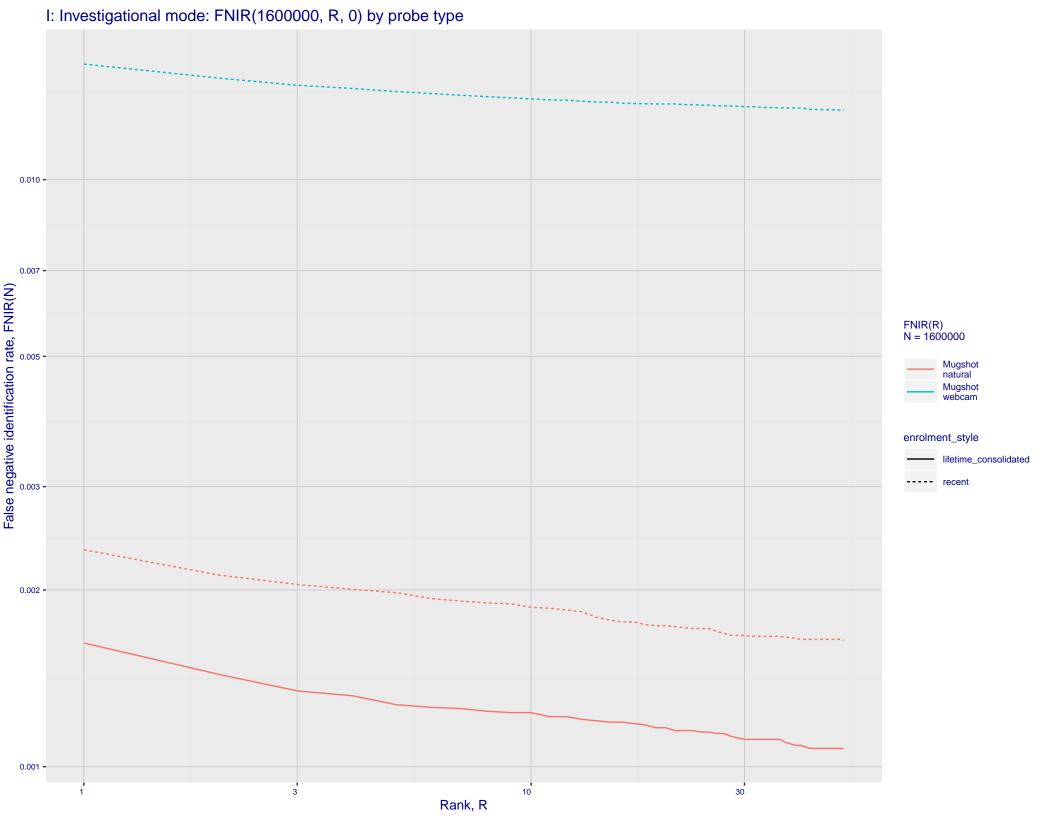
Frontal mugshot investigation rank 31 — FNIR(1600000, 0, 1) = 0.0023 vs. lowest 0.0010 from sensetime_004

natural investigation rank 35 -- FNIR(1600000, 0, 1) = 0.0157 vs. lowest 0.0067 from sensetime_003

Frontal mugshot identification rank 30 -- FNIR(1600000, T, L+1) = 0.0219 vs. lowest 0.0018 from sensetime_004

natural identification rank 25 -- FNIR(1600000, T, L+1) = 0.0642 vs. lowest 0.0122 from sensetime_003





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 5000 -3000 2000 1000 -700 -500 300 200

Enrolled population size, N, one image per person

1e+07

Search Duration (milliseconds)

1e+06