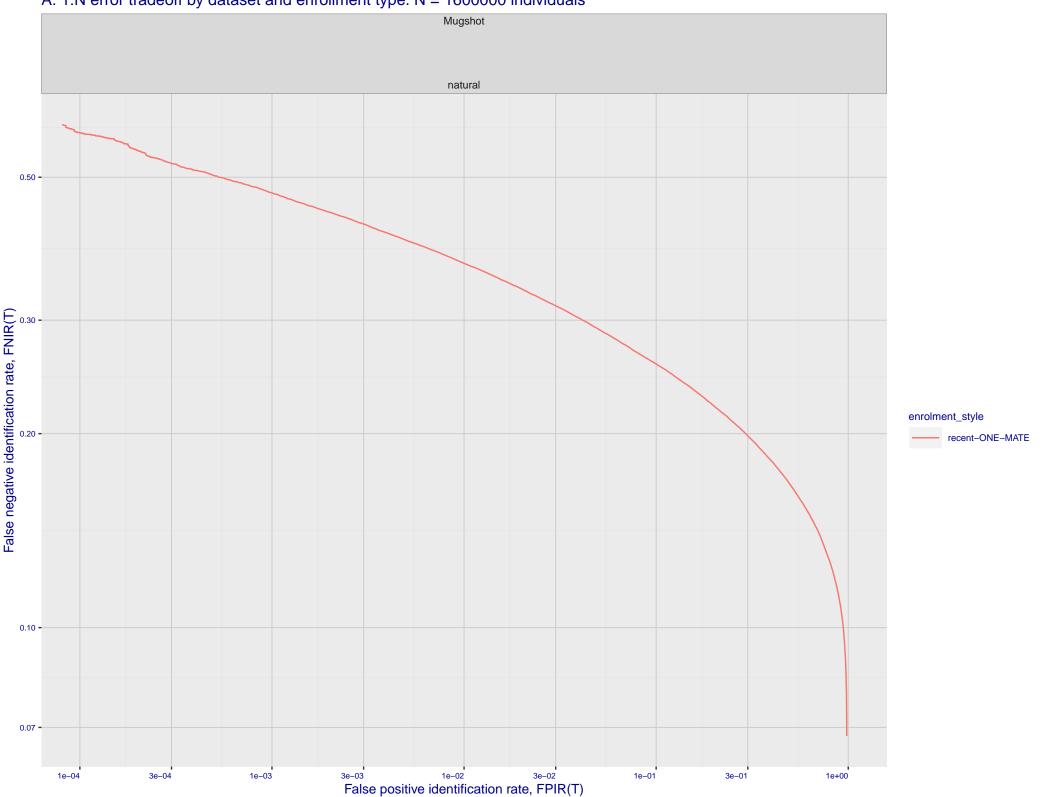
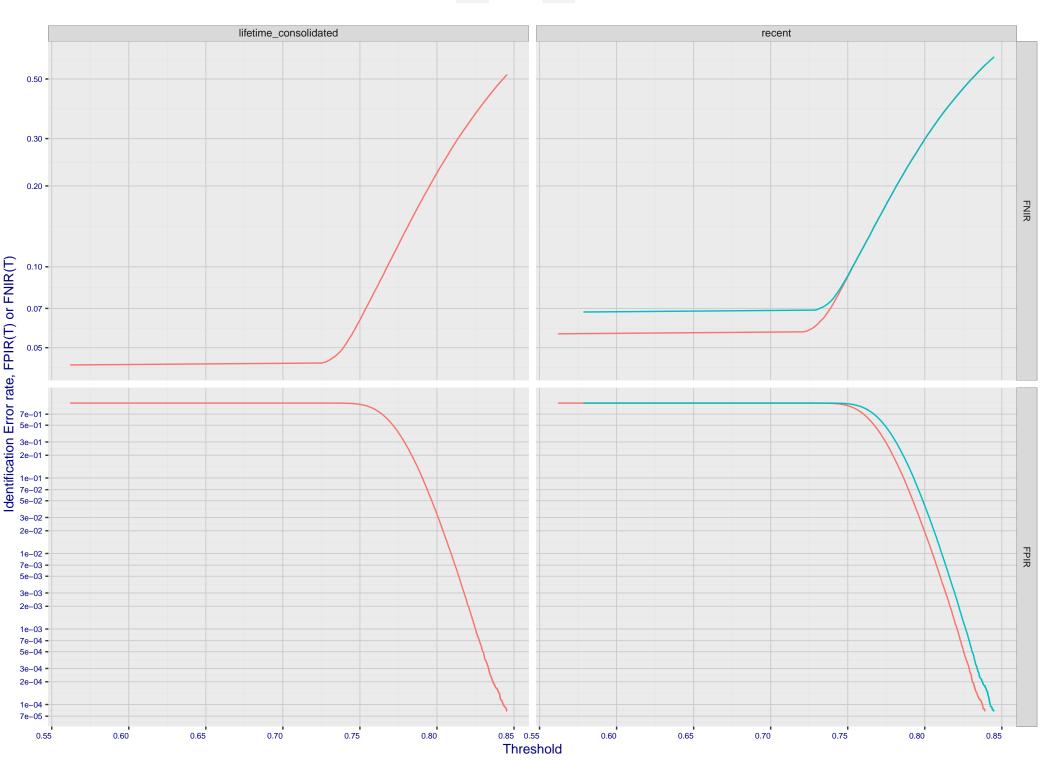
A: 1:N error tradeoff by dataset and enrollment type. N = 1600000 individuals

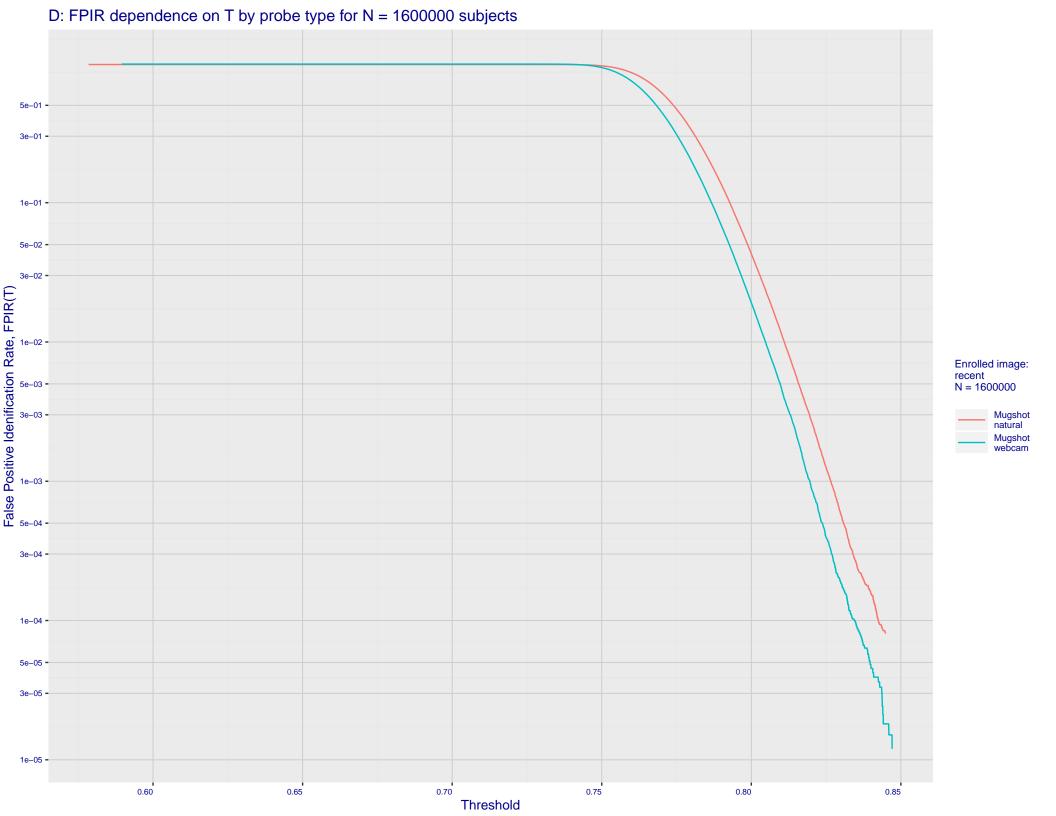


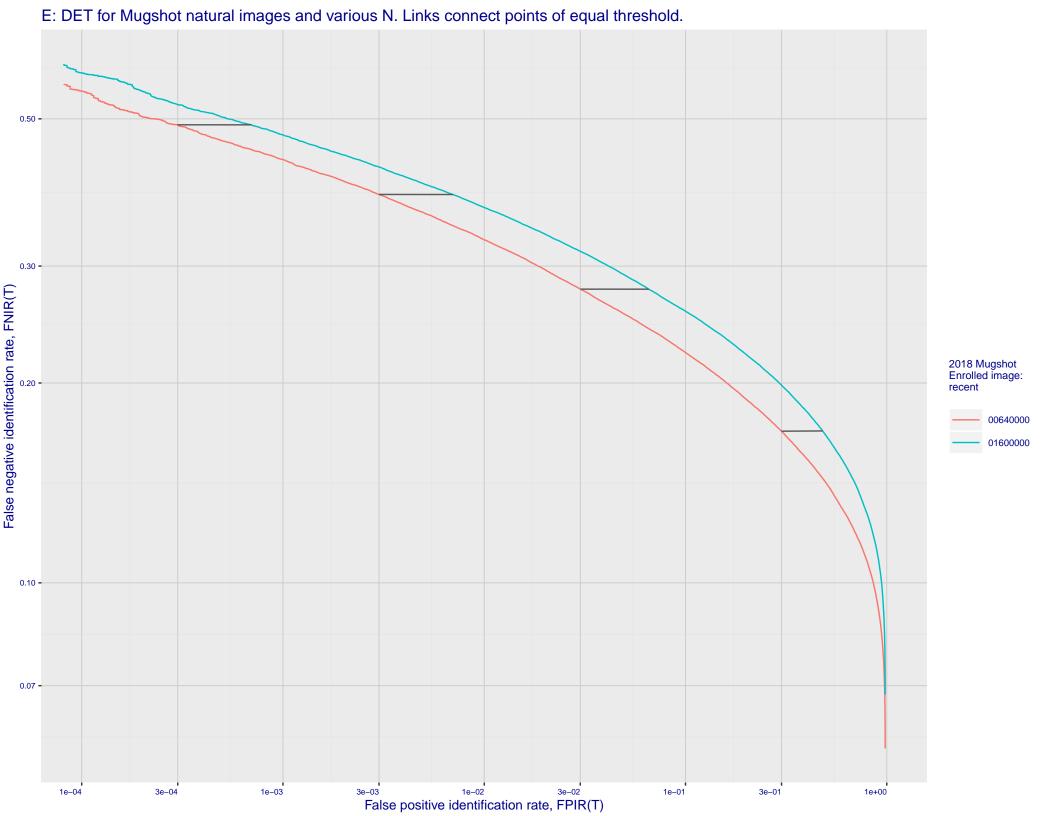
B: Dependence of error rates on T by number enrolled identities, N, for Mugshot natural images

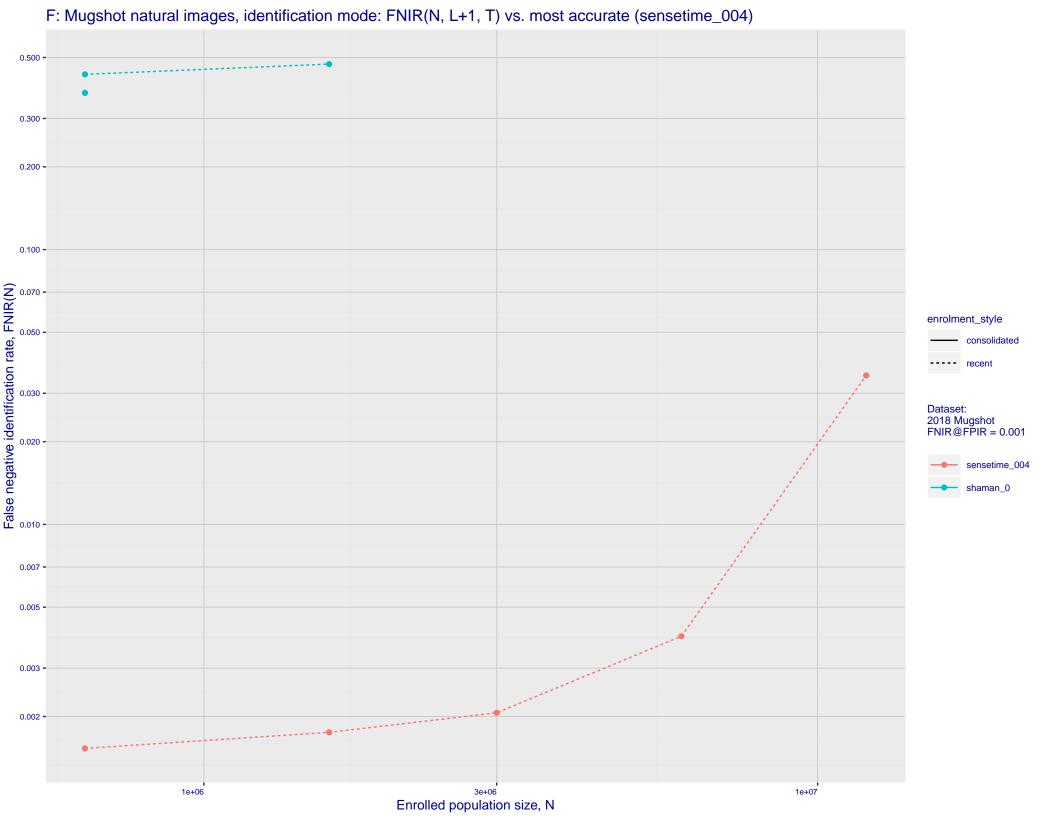




C: FPIR vs. Selectivity for mugshot images, N = 1600000 subjects enrolled with one recent mate 7e+01 5e+01 3e+01 2e+01 -1e+01 -7e+00 -5e+00 -3e+00 -2e+00 -1e+00 -7e-01 -5e-01 -3e-01 2e-01 -1e-01 -7e-02 -7e-02 -5e-02 -3e-02 -2e-02 -7e-03 -Enrolled images: recent N = 1600000Mugshot natural Mugshot webcam 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: shaman\_0

Developer: Shaman Software Submission Date: 2018\_02\_12

Template size: 4096 bytes

Template time (2.5 percentile): 544 msec

Template time (median): 546 msec

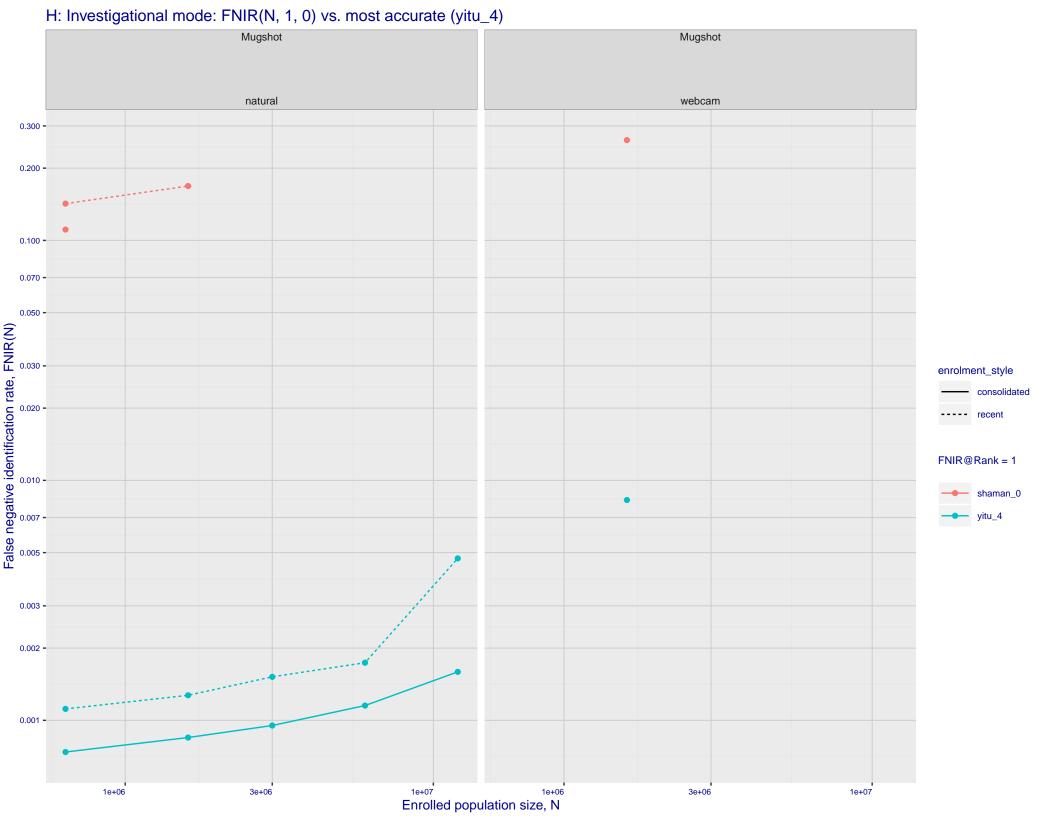
Template time (97.5 percentile): 570 msec

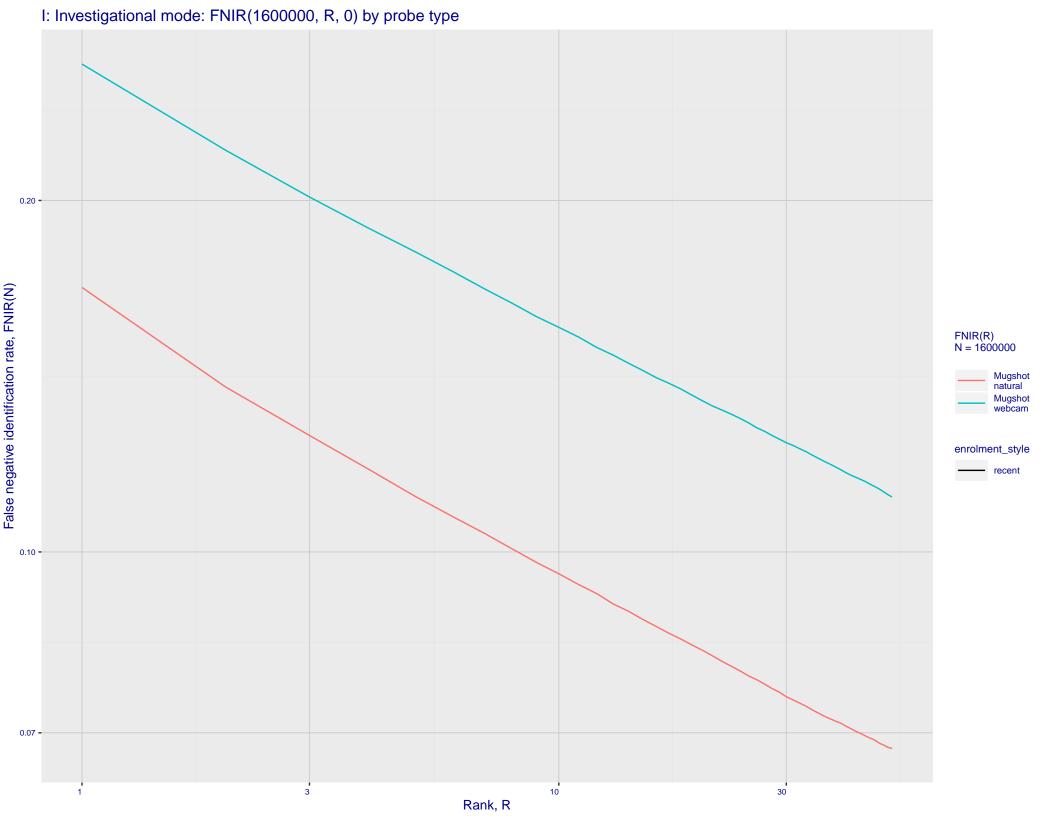
Frontal mugshot investigation rank 217 -- FNIR(1600000, 0, 1) = 0.1685 vs. lowest 0.0010 from sensetime\_004

natural investigation rank 185 -- FNIR(1600000, 0, 1) = 0.2617 vs. lowest 0.0067 from sensetime\_003

Frontal mugshot identification rank 202 -- FNIR(1600000, T, L+1) = 0.4730 vs. lowest 0.0018 from sensetime\_004

natural identification rank 177 -- FNIR(1600000, T, L+1) = 0.6211 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

