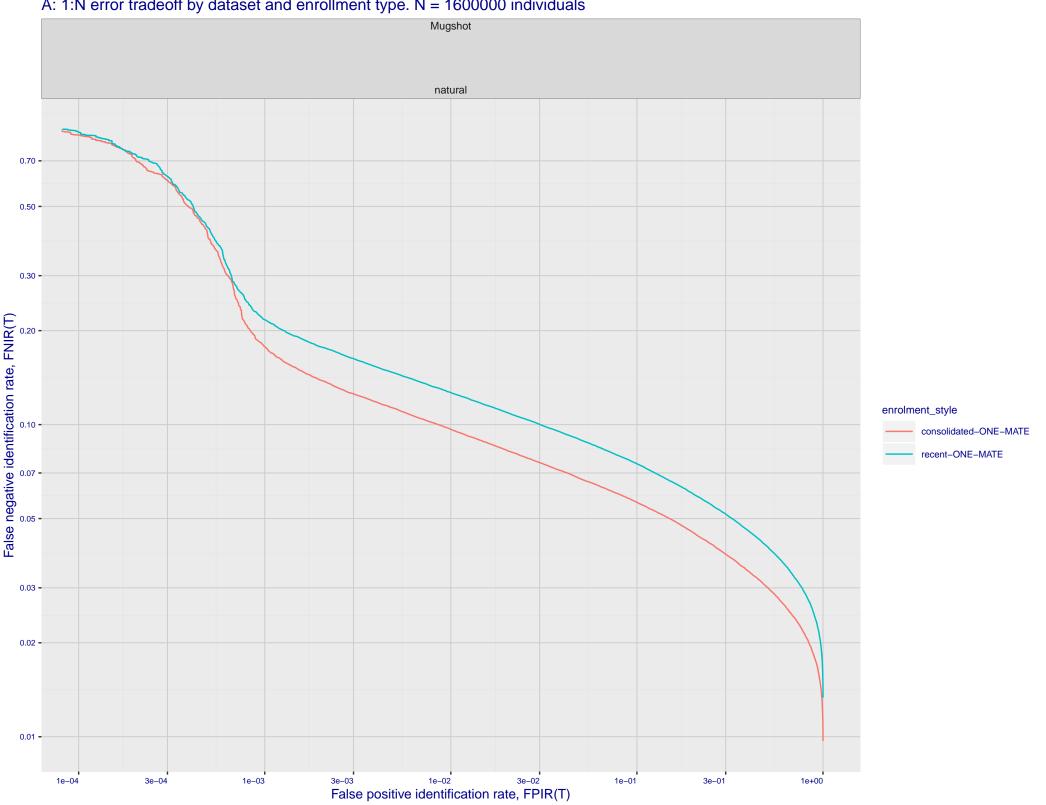
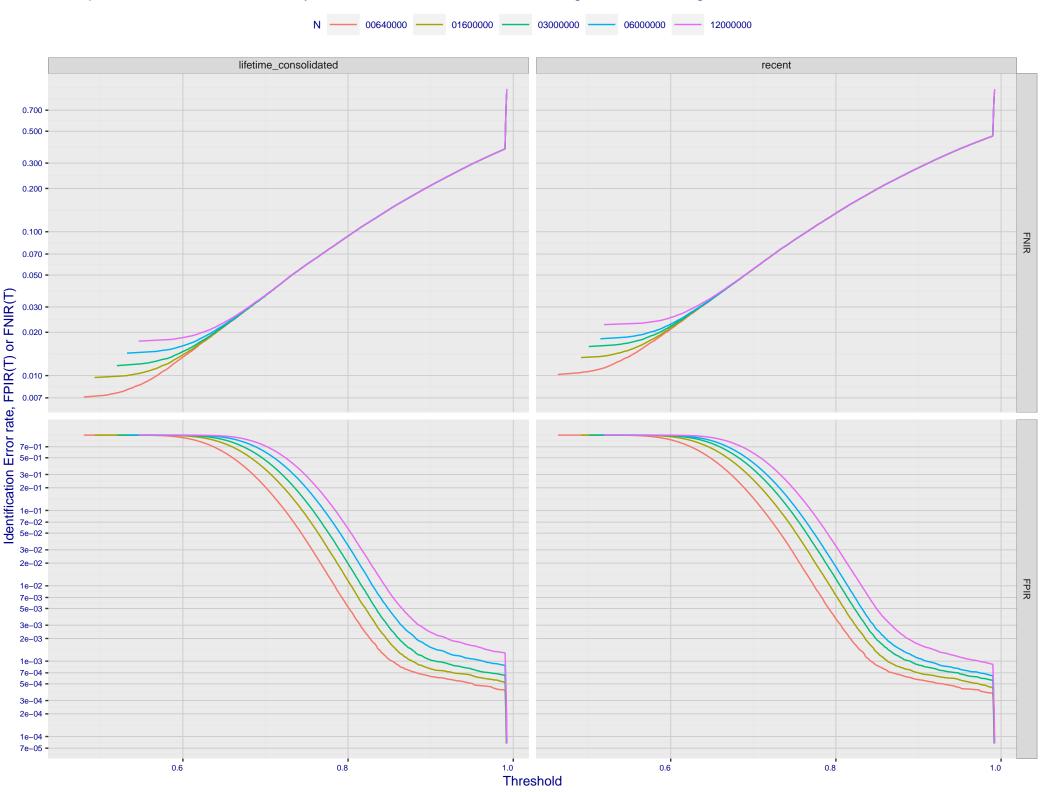
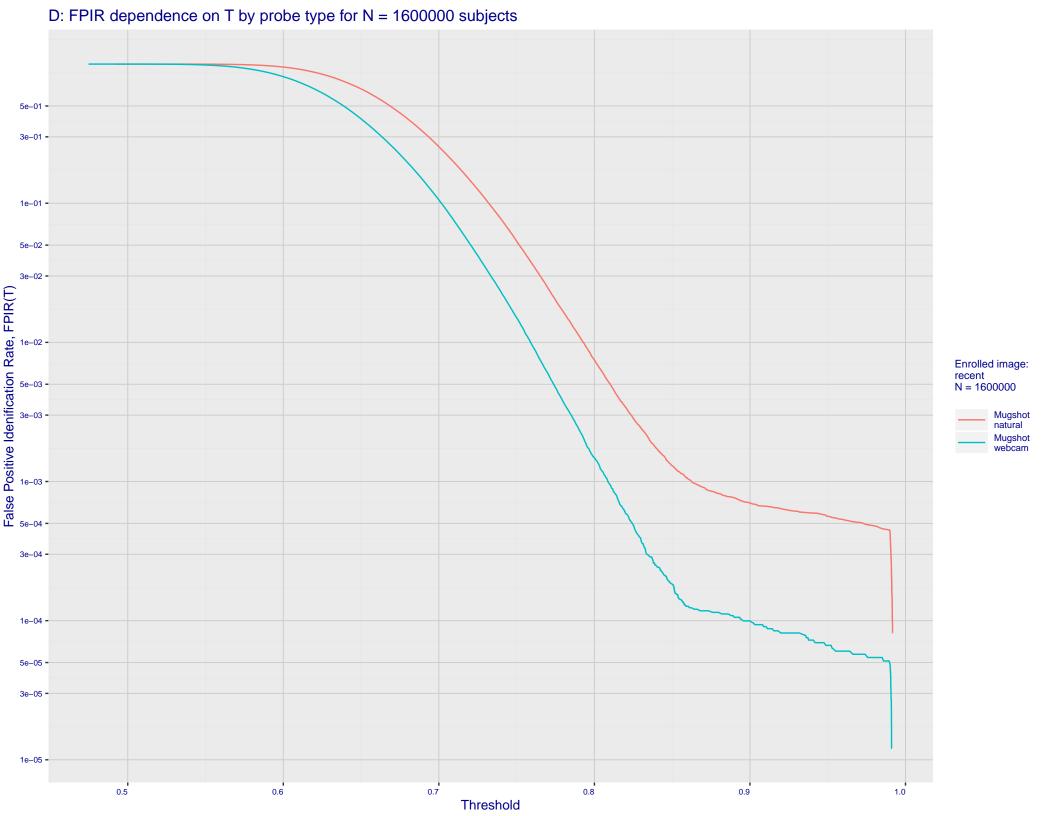
A: 1:N error tradeoff by dataset and enrollment type. N = 1600000 individuals

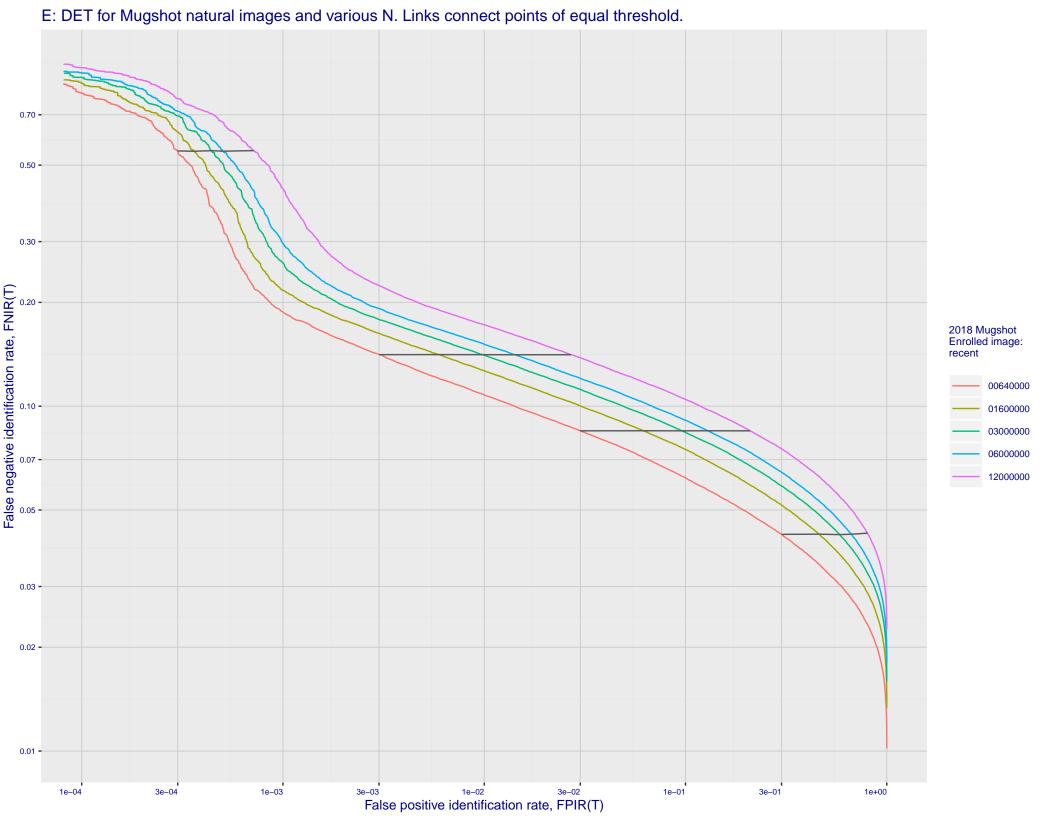


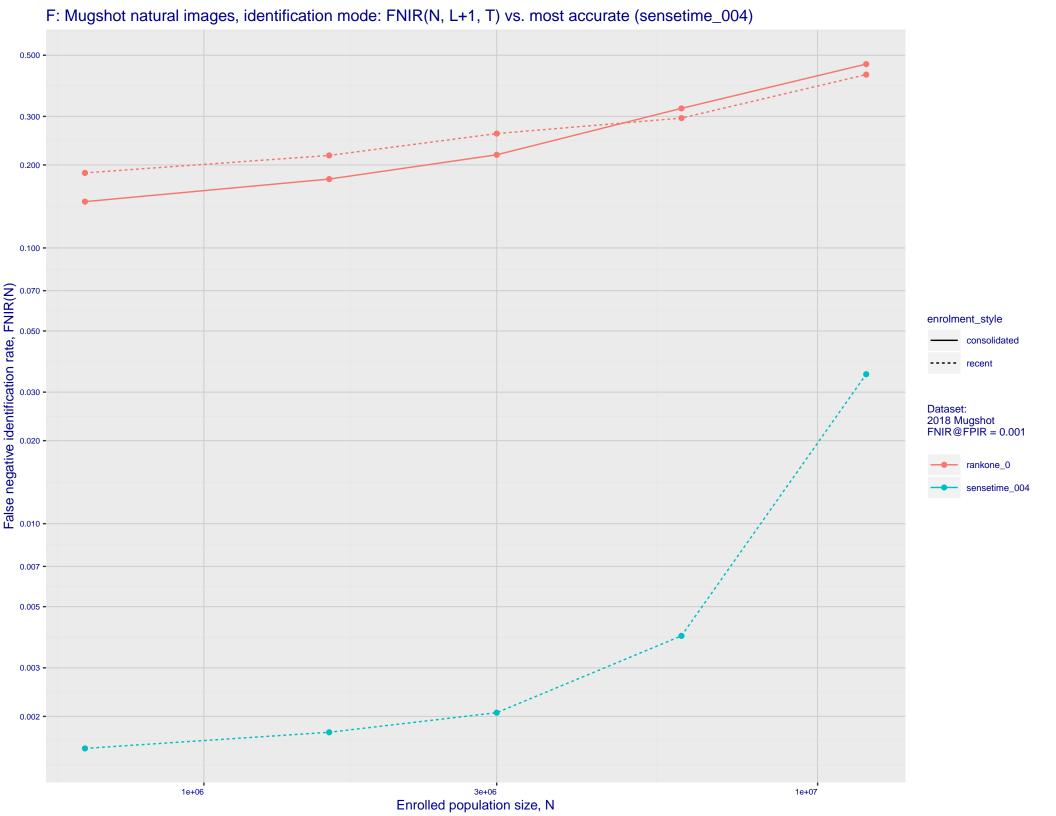
B: Dependence of error rates on T by number enrolled identities, N, for Mugshot natural images



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 -5e-02 -Enrolled images: recent N = 1600000S 3e-02 - 1e-02 -Mugshot 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 -3e-03 1e-05 3e-05 1e-04 3e-04 1e-01 3e-01 False Positive Idenification Rate, FPIR(T)







## G: Datasheet

Algorithm: rankone\_0

Developer: Rank One Computing Submission Date: 2018\_02\_07

Template size: 228 bytes

Template time (2.5 percentile): 47 msec

Template time (median): 50 msec

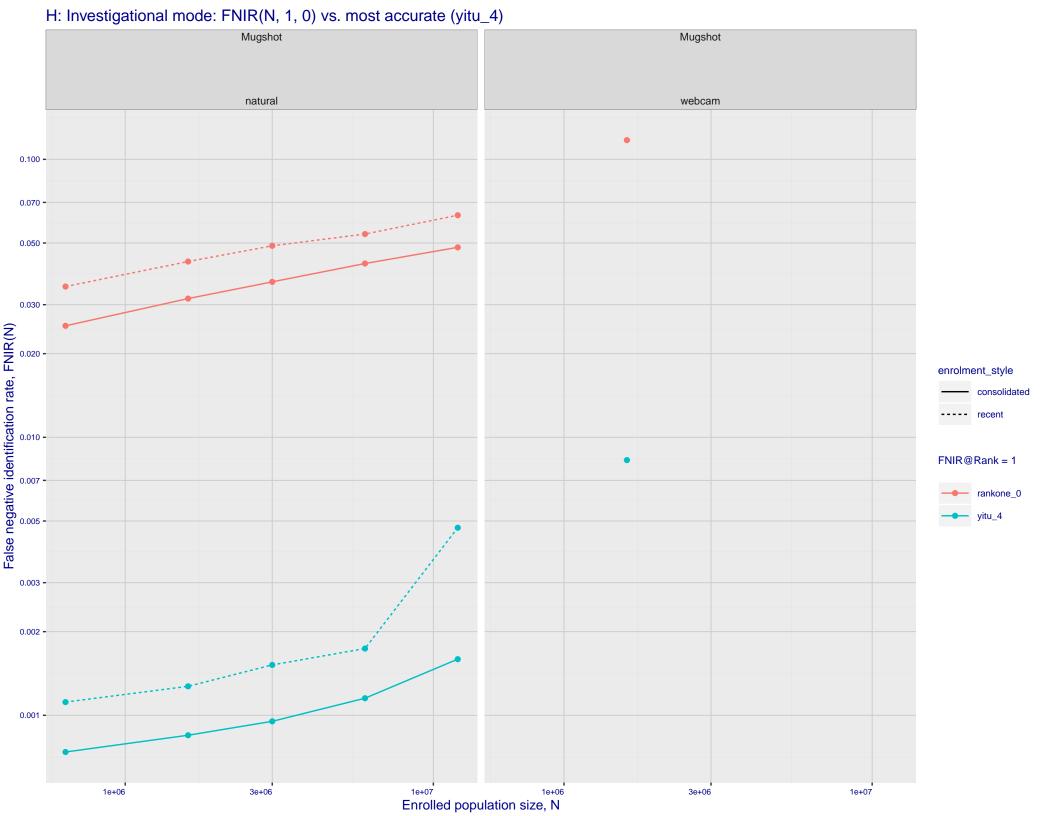
Template time (97.5 percentile): 56 msec

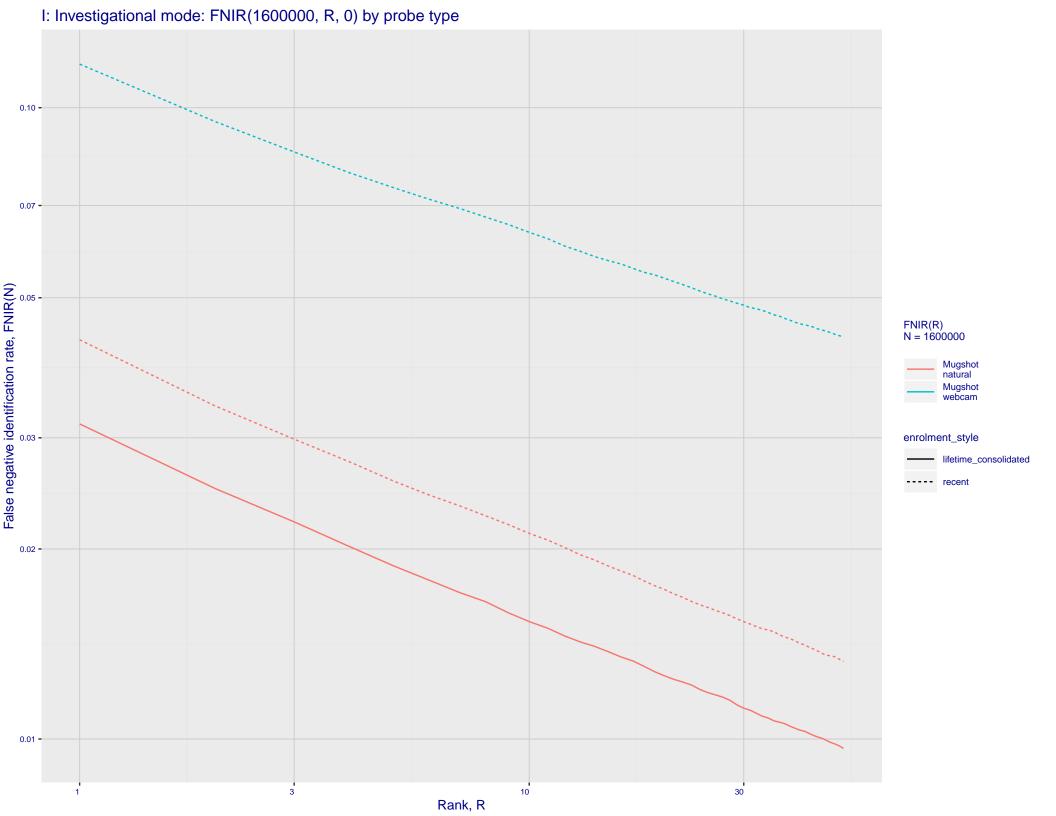
Frontal mugshot investigation rank 184 — FNIR(1600000, 0, 1) = 0.0429 vs. lowest 0.0010 from sensetime\_004

natural investigation rank 169 -- FNIR(1600000, 0, 1) = 0.1172 vs. lowest 0.0067 from sensetime\_003

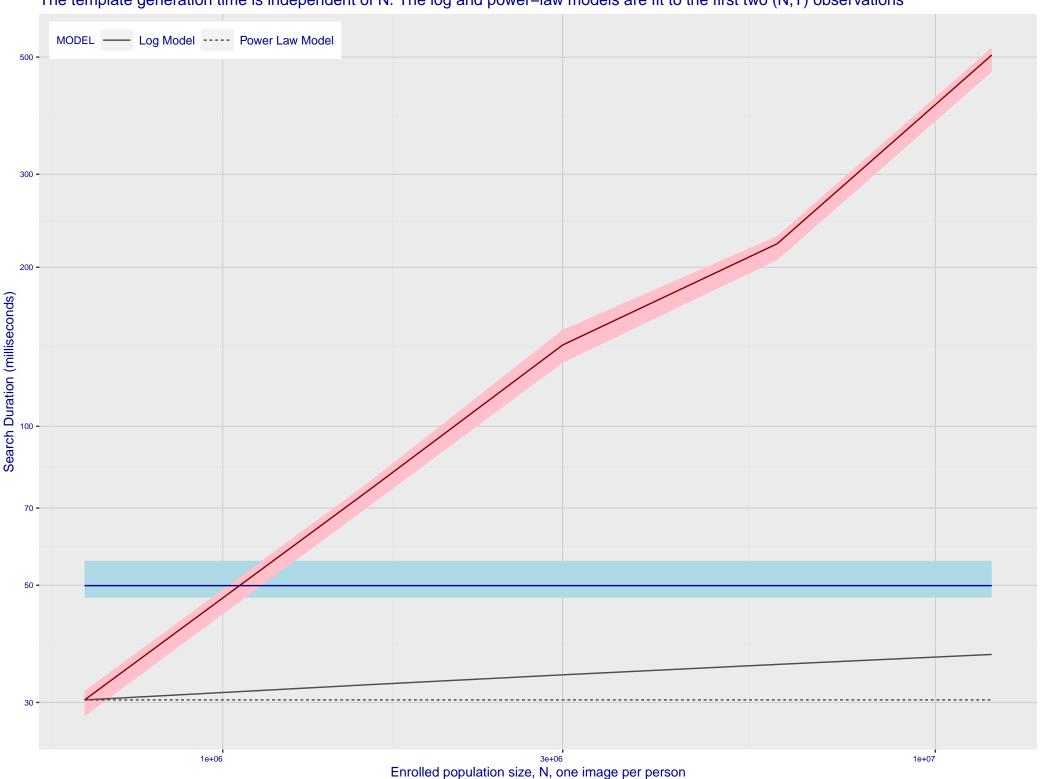
Frontal mugshot identification rank 165 -- FNIR(1600000, T, L+1) = 0.2165 vs. lowest 0.0018 from sensetime\_004

natural identification rank 157 -- FNIR(1600000, T, L+1) = 0.3912 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



M: Identification FNIR(N, T, L+1) and Investigational FNIR(N, 0, R) under ageing

