A: 1:N error tradeoff by dataset and enrollment type. N = 1600000 individuals Mugshot natural 0.50 -False negative identification rate, FNIR(T) enrolment_style consolidated-ONE-MATE recent-ONE-MATE 0.10 -0.07 -

1e-01

3e-01

1e+00

1e-02

False positive identification rate, FPIR(T)

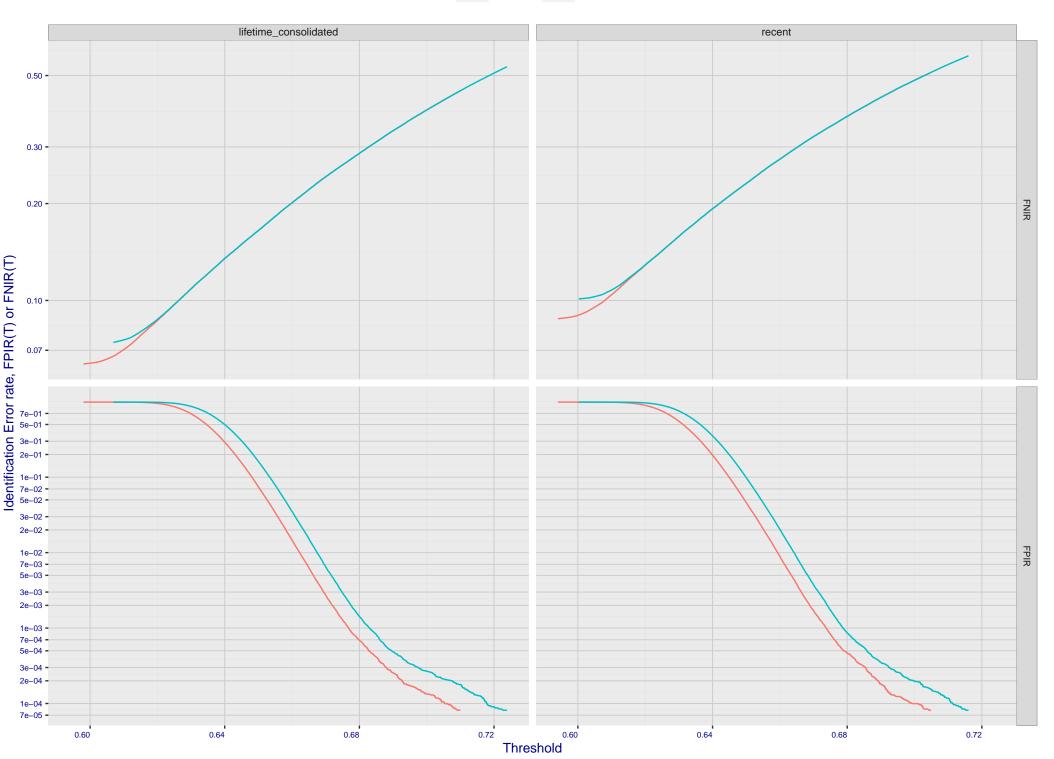
1e-04

3e-04

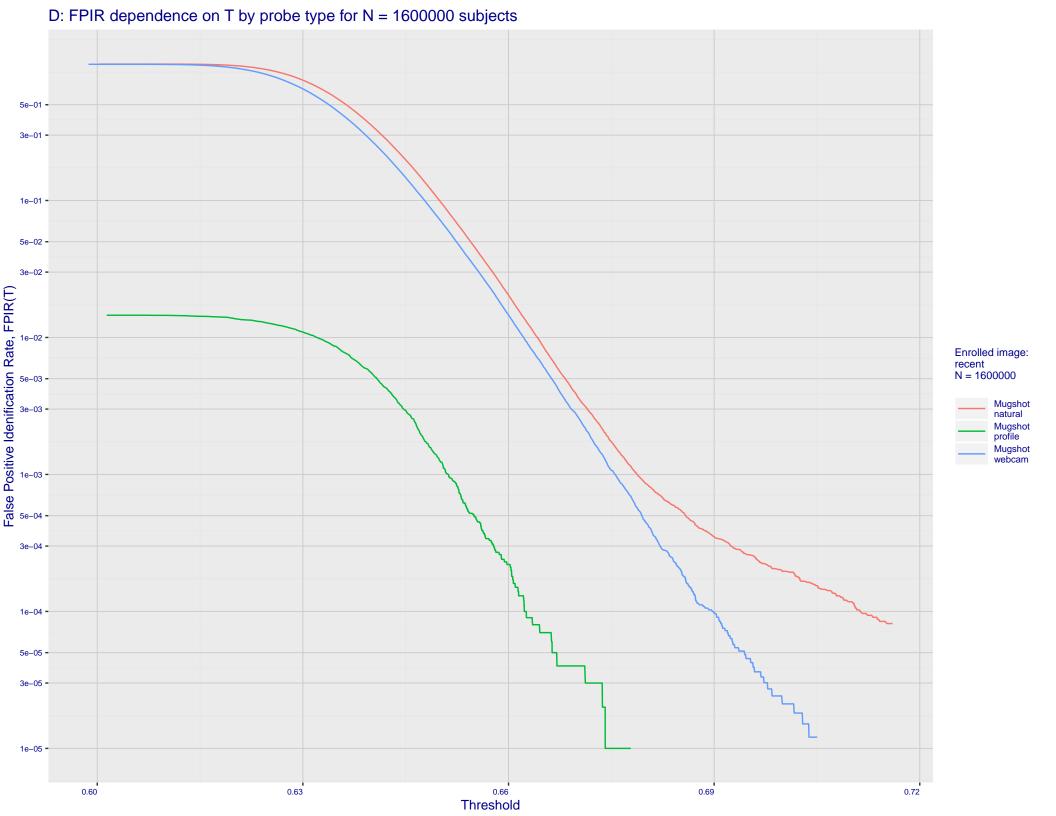
1e-03

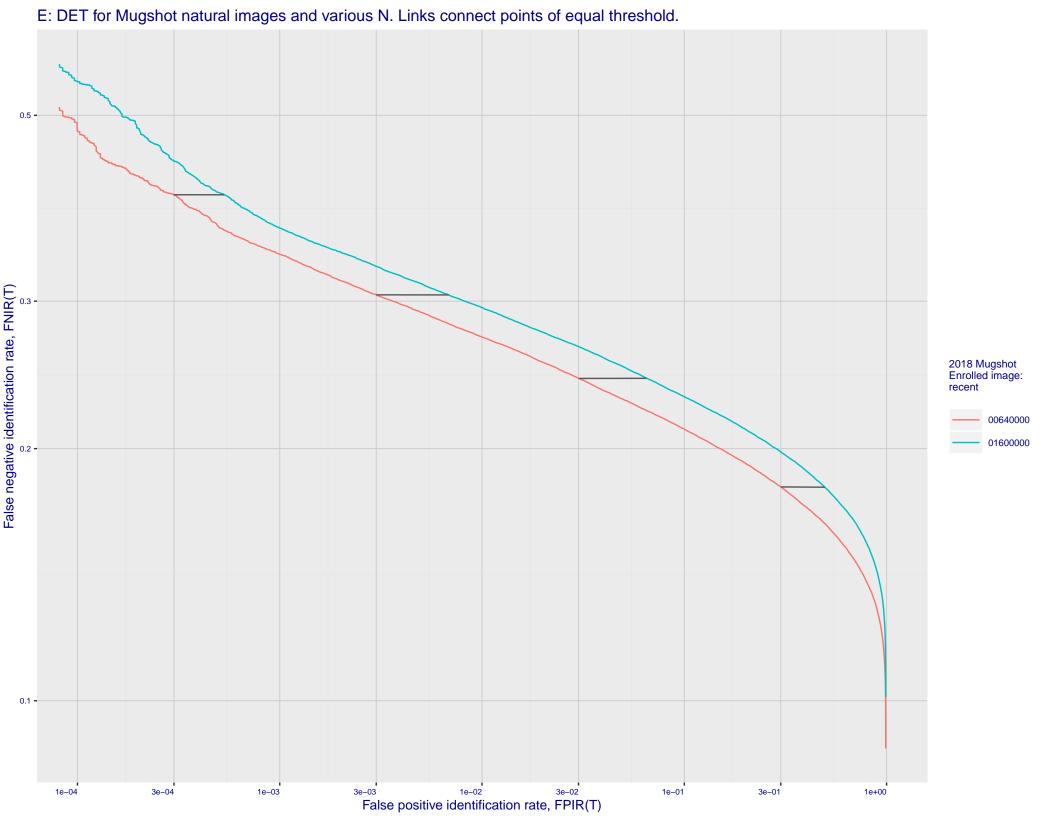
B: Dependence of error rates on T by number enrolled identities, N, for Mugshot natural images

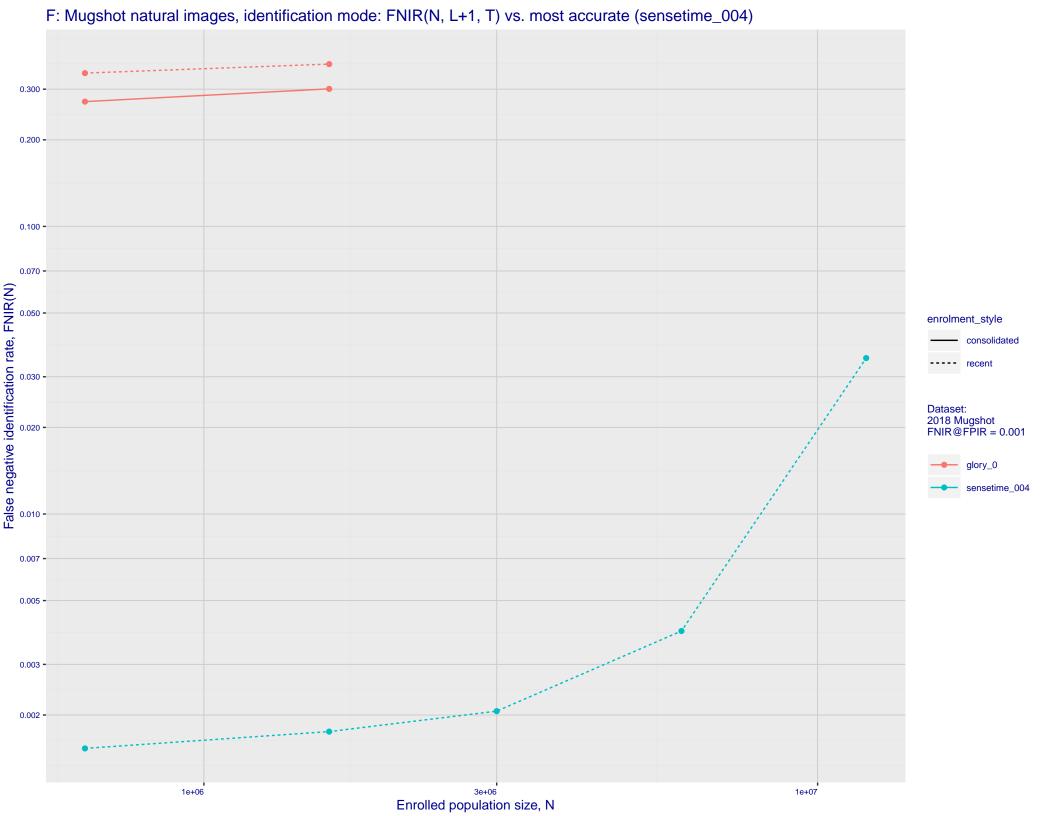




C: FPIR vs. Selectivity for mugshot images, N = 1600000 subjects enrolled with one recent mate 7e+01 5e+01 3e+01 -2e+01 -1e+01 -7e+00 -5e+00 -3e+00 -2e+00 -1e+00 -7e-01 -5e-01 -3e-01 2e-01 -1e-01 -7e-02 - 5e-02 - 5e-02 - 7e-03 Enrolled images: recent N = 1600000 Mugshot natural Mugshot profile Mugshot webcam 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: glory_0

Developer: Glory Ltd

Submission Date: 2018_06_30

Template size: 418 bytes

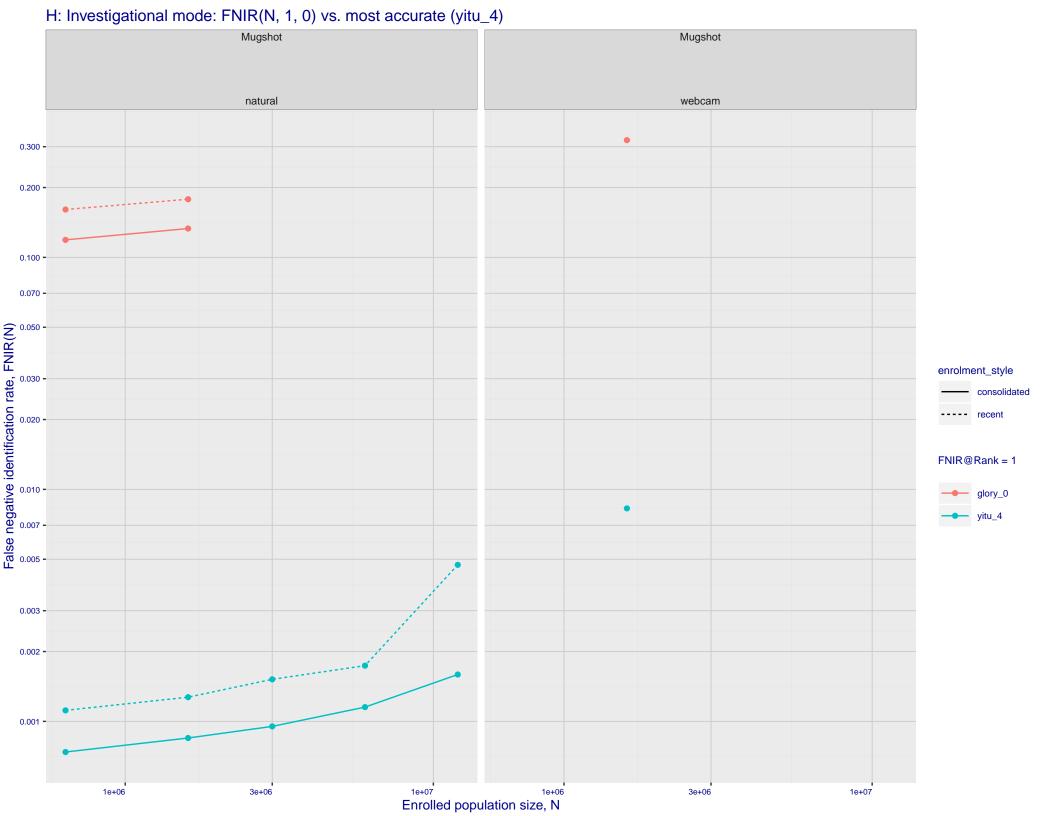
Template time (2.5 percentile): 153 msec

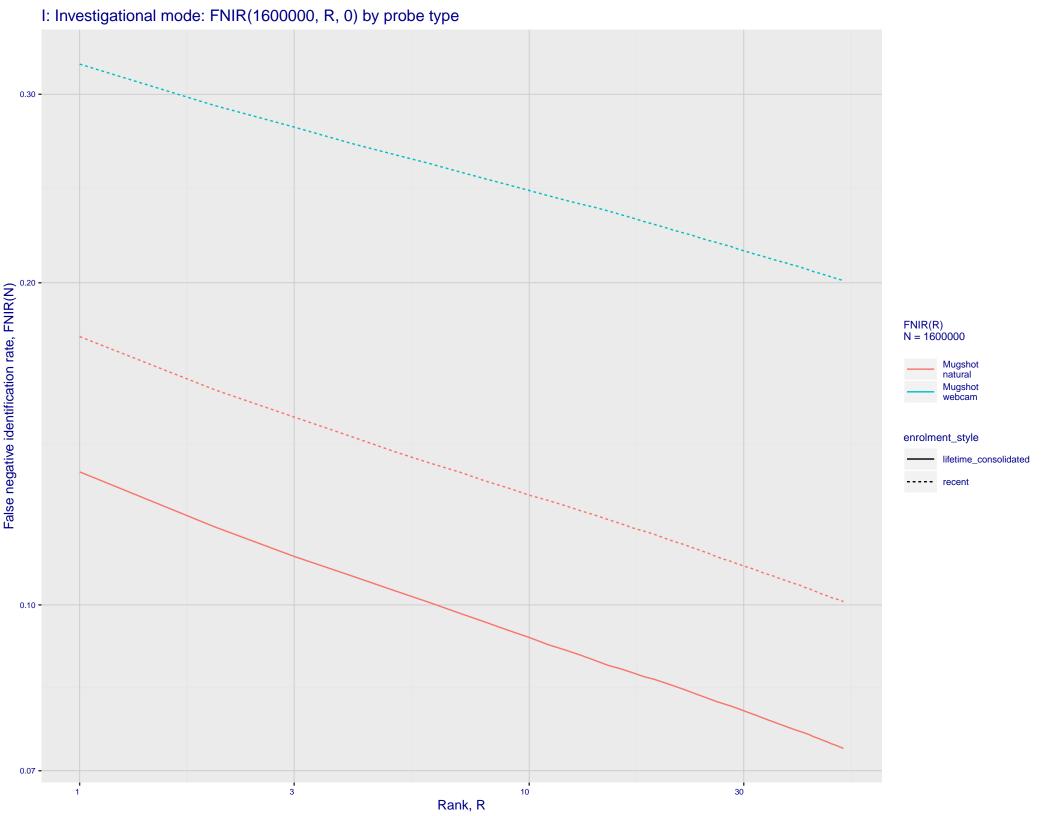
Template time (median): 159 msec

Template time (97.5 percentile): 174 msec

Frontal mugshot investigation rank 220 — FNIR(1600000, 0, 1) = 0.1781 vs. lowest 0.0010 from sensetime_004 natural investigation rank 189 — FNIR(1600000, 0, 1) = 0.3201 vs. lowest 0.0067 from sensetime_003 natural investigation rank 362 — FNIR(1600000, 0, 1) = 0.9971 vs. lowest 0.0492 from paravision_005 natural investigation rank 362 — FNIR(1600000, 0, 1) = 0.9971 vs. lowest 0.0492 from paravision_005

Frontal mugshot identification rank 191 — FNIR(1600000, T, L+1) = 0.3668 vs. lowest 0.0018 from sensetime_004 natural identification rank 173 — FNIR(1600000, T, L+1) = 0.5475 vs. lowest 0.0122 from sensetime_003 natural identification rank 114 — FNIR(1600000, T, L+1) = 0.9976 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

