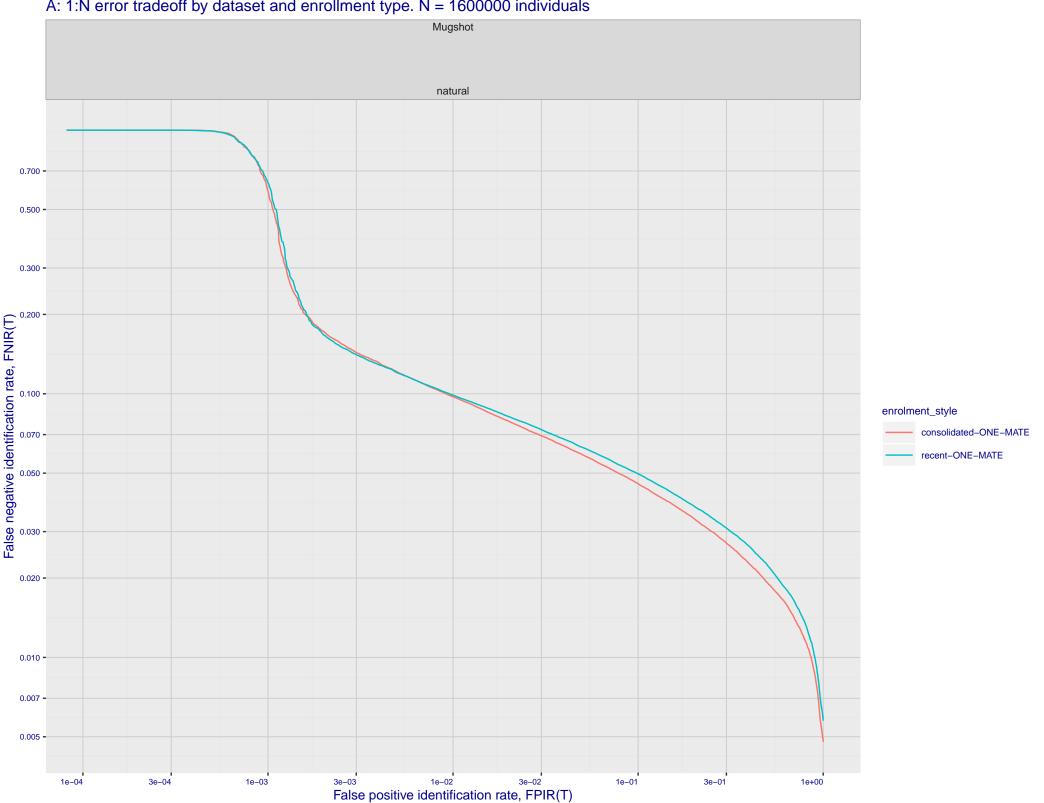
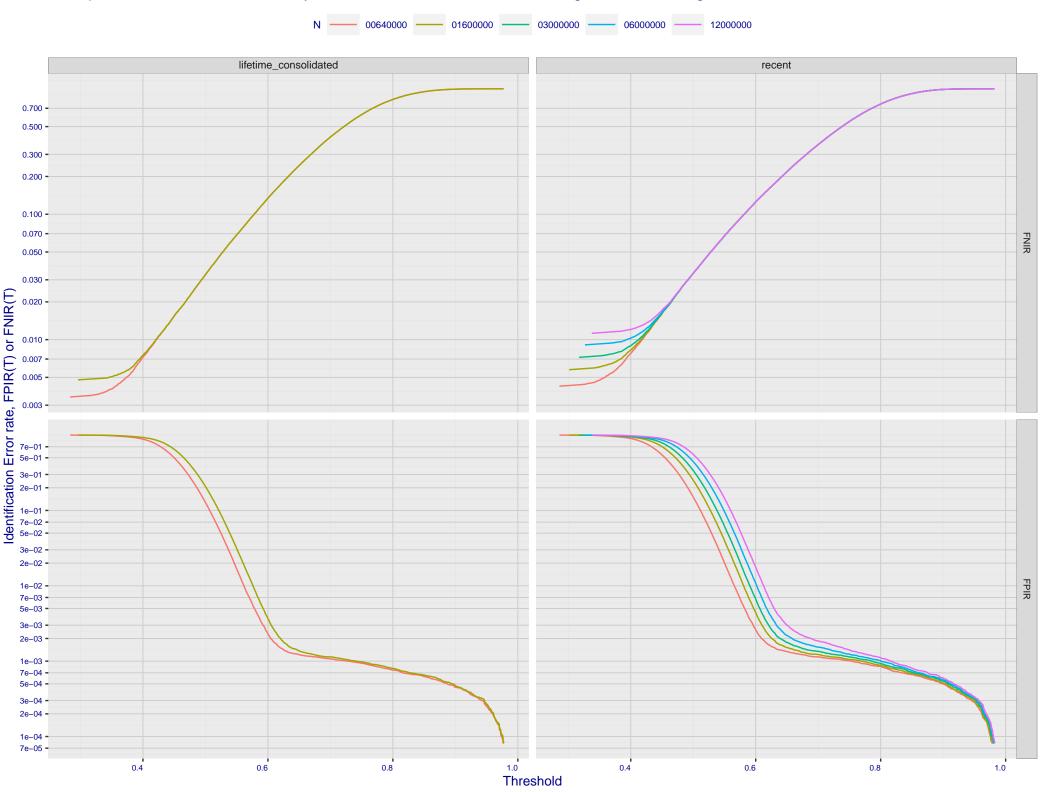
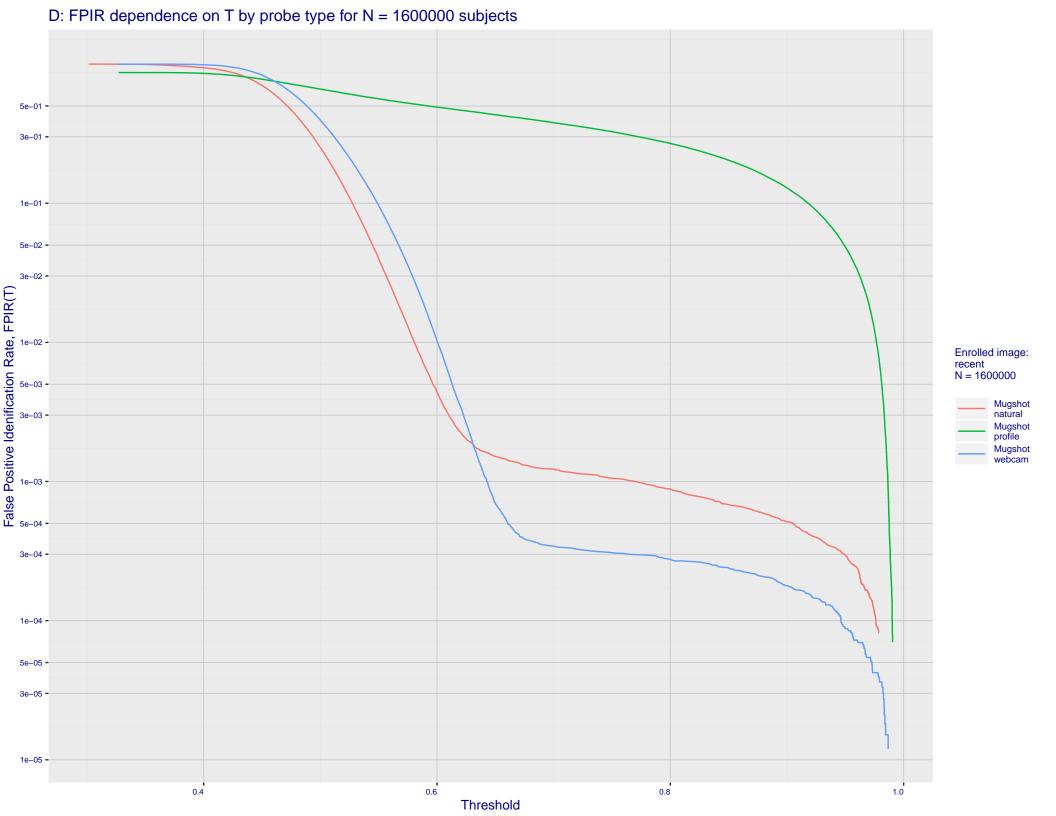
A: 1:N error tradeoff by dataset and enrollment type. N = 1600000 individuals

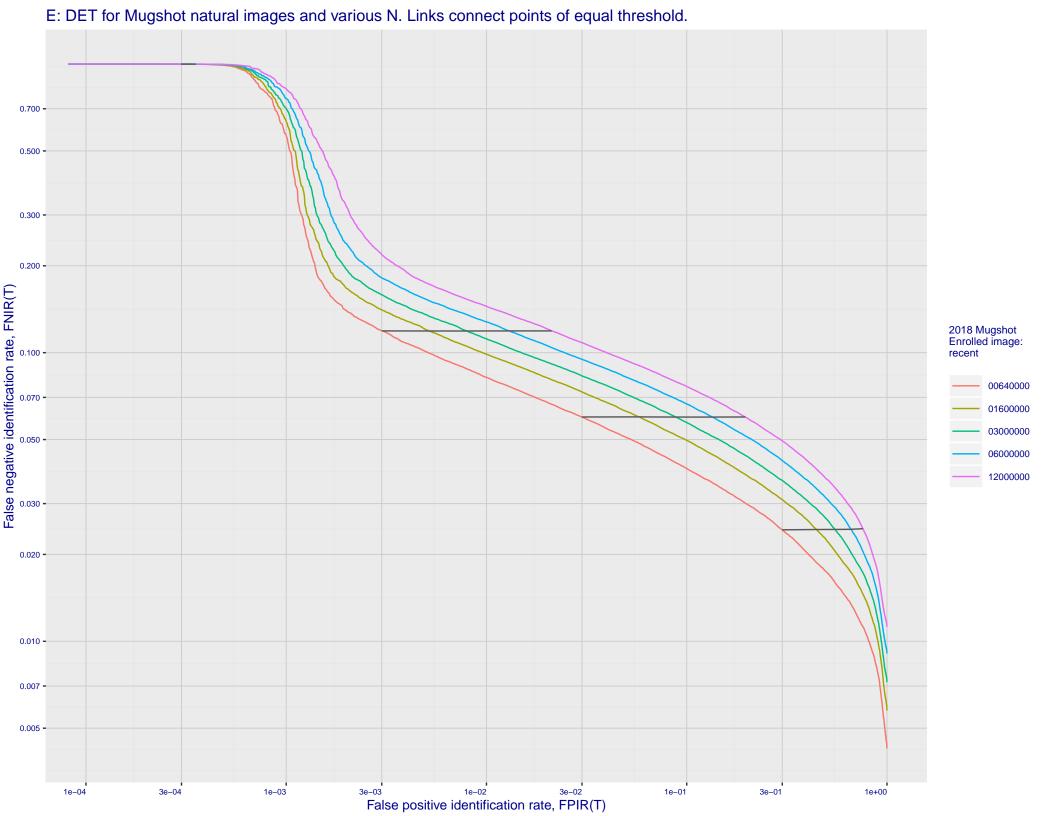


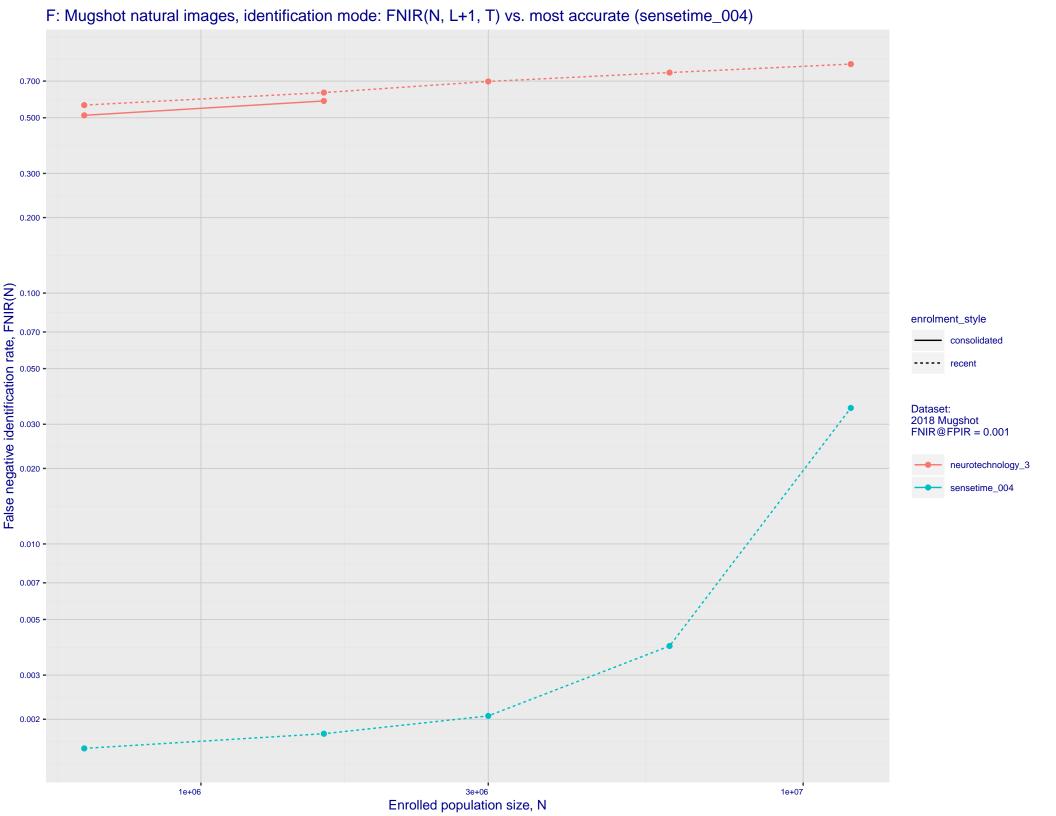
B: Dependence of error rates on T by number enrolled identities, N, for Mugshot natural images



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 Enrolled images: recent N = 1600000 1e-01 - 7e-02 - 7e-02 - 3e-02 - 2e-02 - 9 Mugshot natural Mugshot profile 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 -3e-04 1e-03 1e-05 3e-05 1e-04 1e-01 3e-01 False Positive Idenification Rate, FPIR(T)







G: Datasheet

Algorithm: neurotechnology_3

Developer: Neurotechnology

Submission Date: 2018_06_27

Template size: 2048 bytes

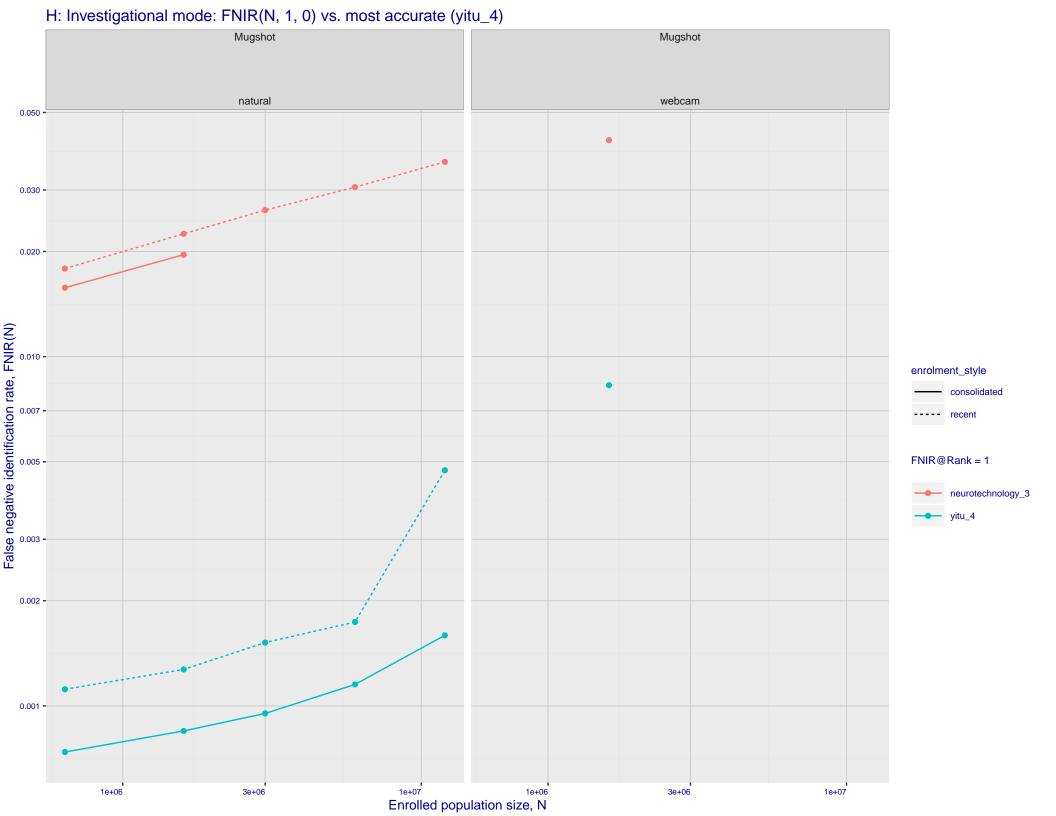
Template time (2.5 percentile): 526 msec

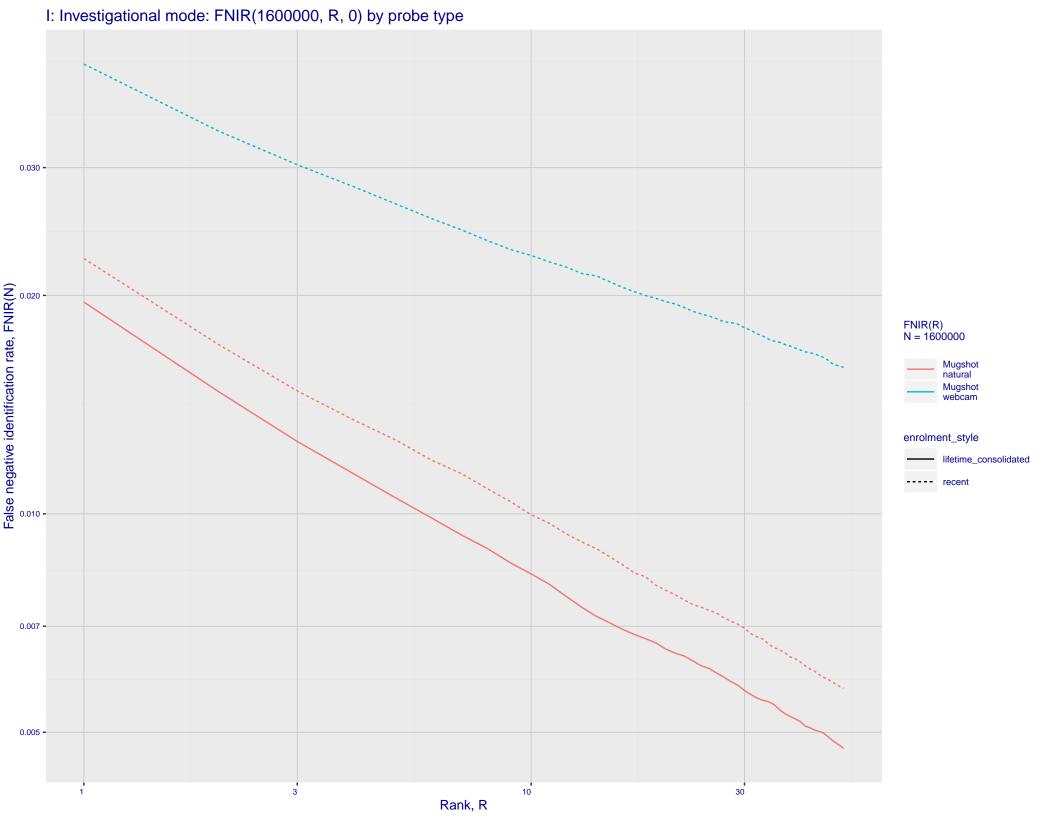
Template time (median): 540 msec

Template time (97.5 percentile): 590 msec

Frontal mugshot investigation rank 158 — FNIR(1600000, 0, 1) = 0.0225 vs. lowest 0.0010 from sensetime_004 natural investigation rank 124 — FNIR(1600000, 0, 1) = 0.0417 vs. lowest 0.0067 from sensetime_003 natural investigation rank 271 — FNIR(1600000, 0, 1) = 0.9469 vs. lowest 0.0492 from paravision_005 natural investigation rank 271 — FNIR(1600000, 0, 1) = 0.9469 vs. lowest 0.0492 from paravision_005

Frontal mugshot identification rank 219 — FNIR(1600000, T, L+1) = 0.6299 vs. lowest 0.0018 from sensetime_004 natural identification rank 136 — FNIR(1600000, T, L+1) = 0.2661 vs. lowest 0.0122 from sensetime_003 natural identification rank 173 — FNIR(1600000, T, L+1) = 0.9999 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 - Log Model ---- Power Law Model 7000 5000 Search Duration (milliseconds) 1000 700 500 -

Enrolled population size, N, one image per person

1e+06

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

