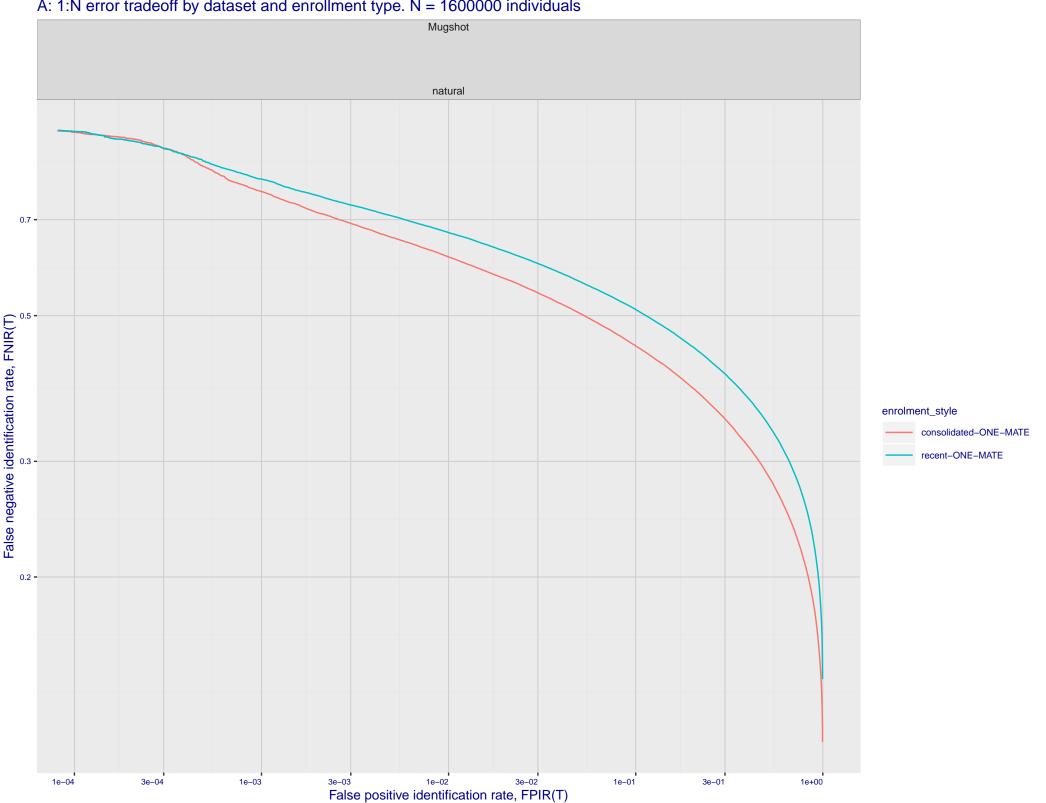
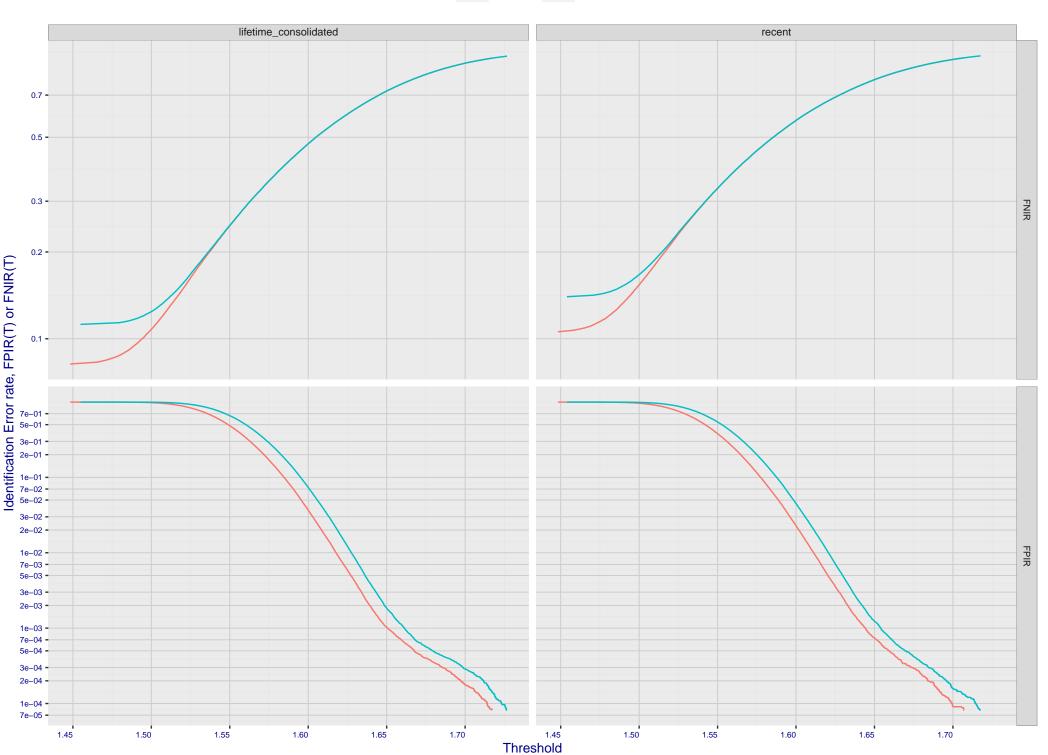
A: 1:N error tradeoff by dataset and enrollment type. N = 1600000 individuals

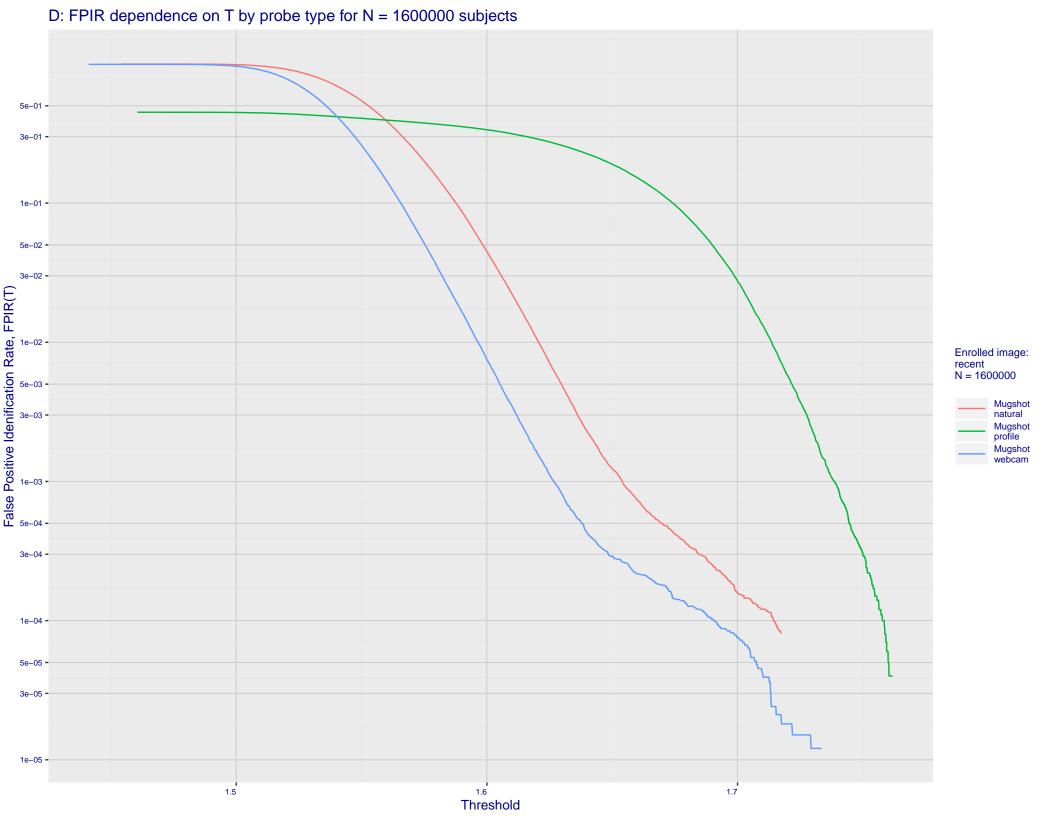


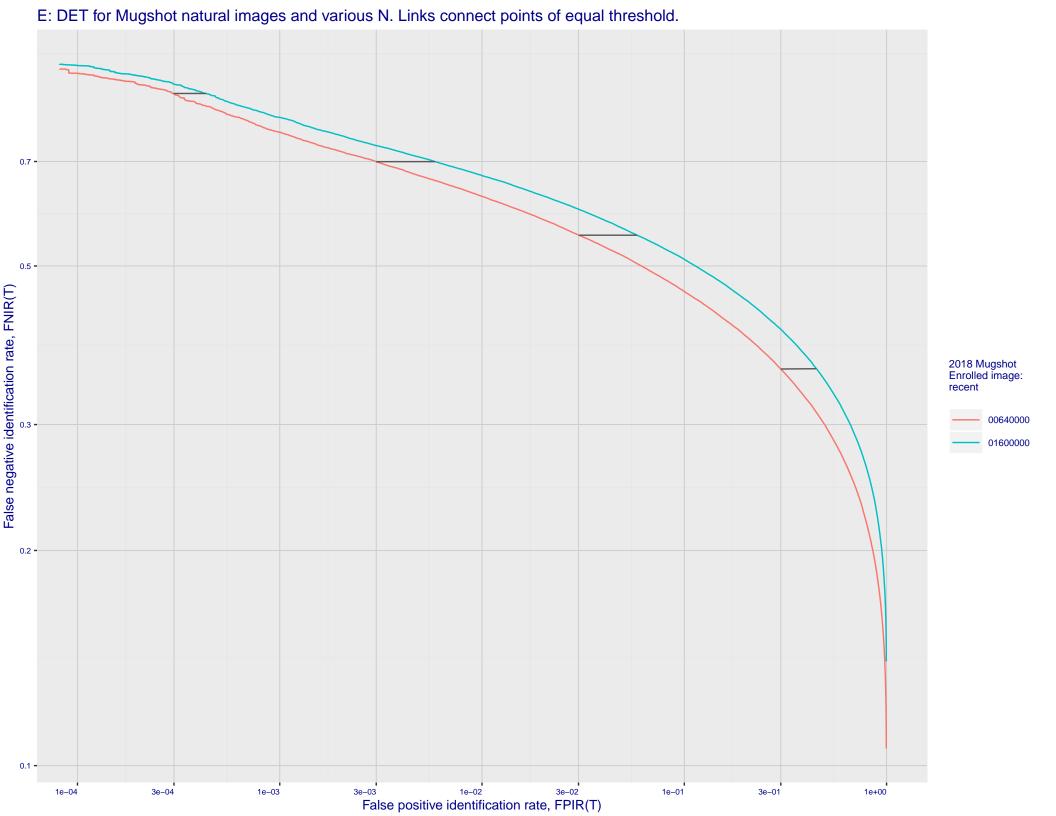
B: Dependence of error rates on T by number enrolled identities, N, for Mugshot natural images

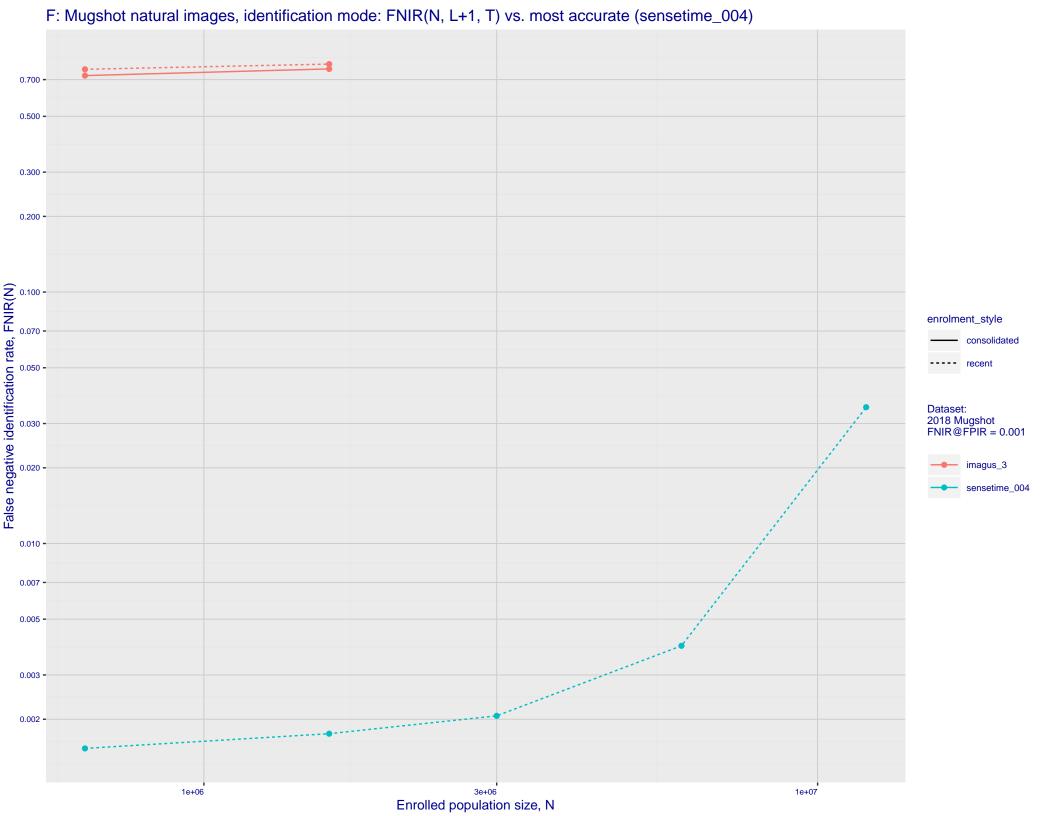




C: FPIR vs. Selectivity for mugshot images, N = 1600000 subjects enrolled with one recent mate 7e+01 -5e+01 3e+01 2e+01 1e+01 -7e+00 -5e+00 -3e+00 -2e+00 -1e+00 -7e-01 -5e-01 • 3e-01 2e-01 -1e-01 - 7e-02 - 7e-02 - 1e-02 Enrolled images: recent N = 1600000 Mugshot natural Mugshot profile Mugshot 1e-02 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-04 3e-04 1e-01 3e-01 False Positive Idenification Rate, FPIR(T)







## G: Datasheet

Algorithm: imagus\_3

Developer: Imagus Technology Pty Ltd

Submission Date: 2018\_06\_21

Template size: 512 bytes

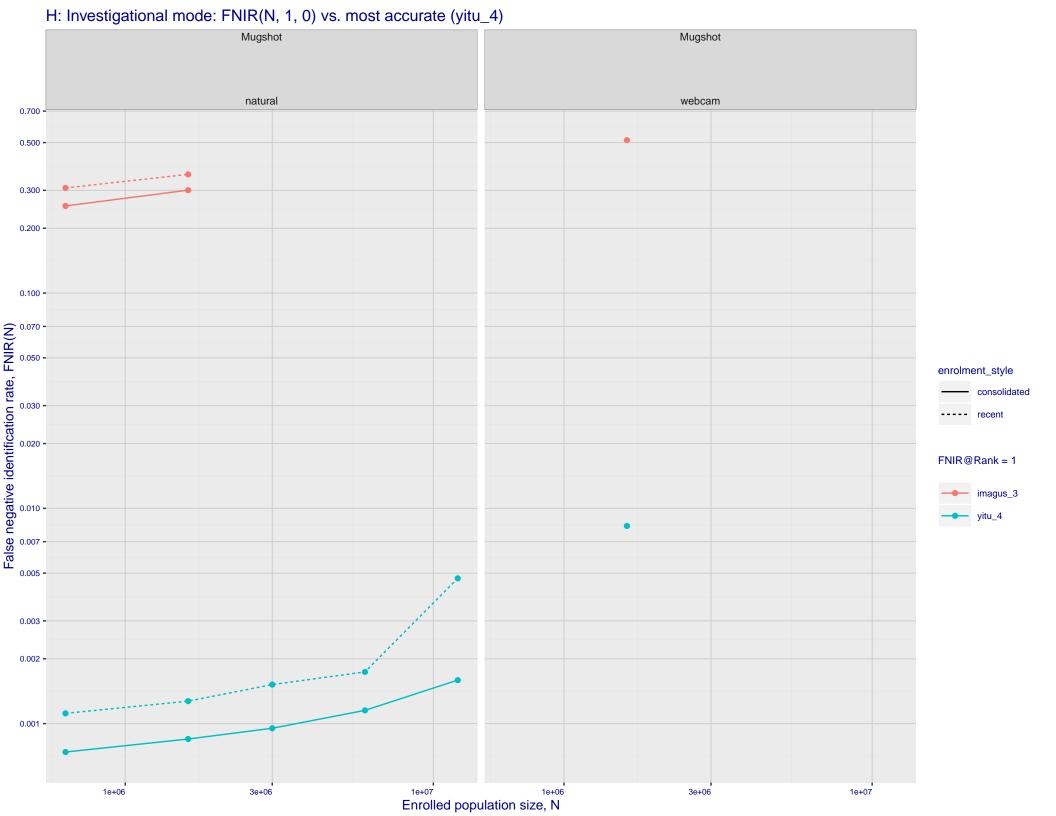
Template time (2.5 percentile): 44 msec

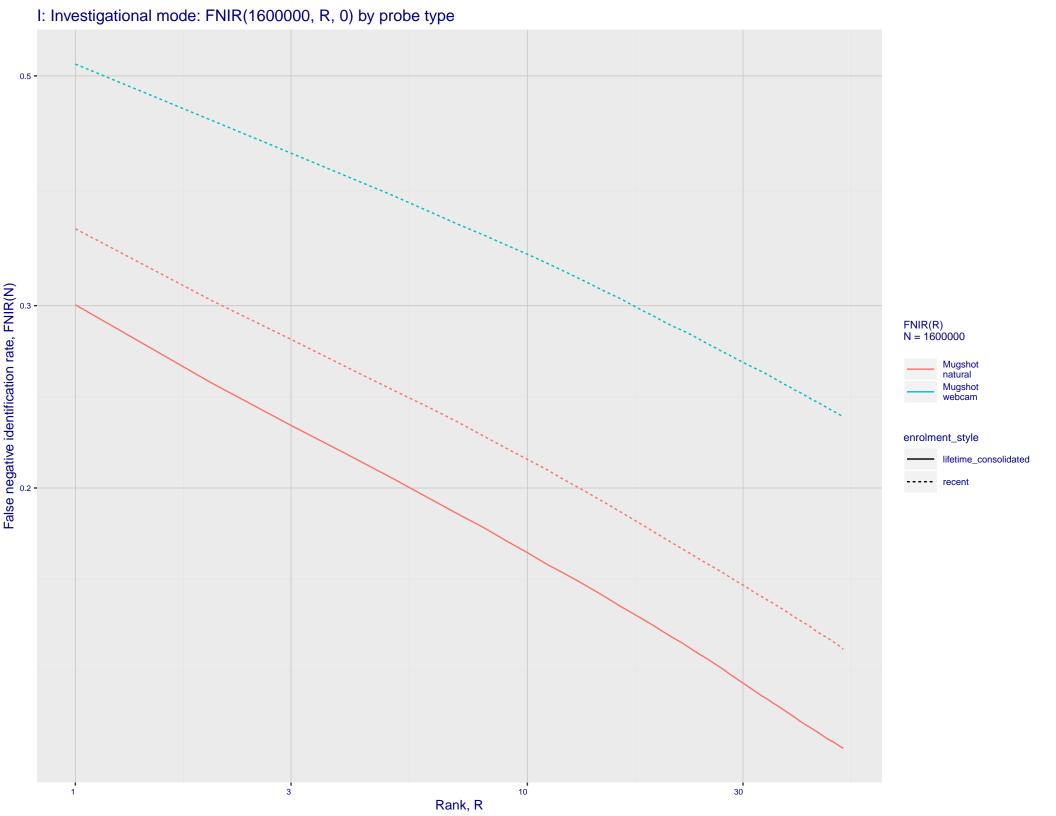
Template time (median): 50 msec

Template time (97.5 percentile): 64 msec

Frontal mugshot investigation rank 240 — FNIR(1600000, 0, 1) = 0.3559 vs. lowest 0.0010 from sensetime\_004 natural investigation rank 200 — FNIR(1600000, 0, 1) = 0.5133 vs. lowest 0.0067 from sensetime\_003 natural investigation rank 349 — FNIR(1600000, 0, 1) = 0.9909 vs. lowest 0.0492 from paravision\_005 natural investigation rank 349 — FNIR(1600000, 0, 1) = 0.9909 vs. lowest 0.0492 from paravision\_005

Frontal mugshot identification rank 229 — FNIR(1600000, T, L+1) = 0.8069 vs. lowest 0.0018 from sensetime\_004 natural identification rank 193 — FNIR(1600000, T, L+1) = 0.9091 vs. lowest 0.0122 from sensetime\_003 natural identification rank 161 — 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

