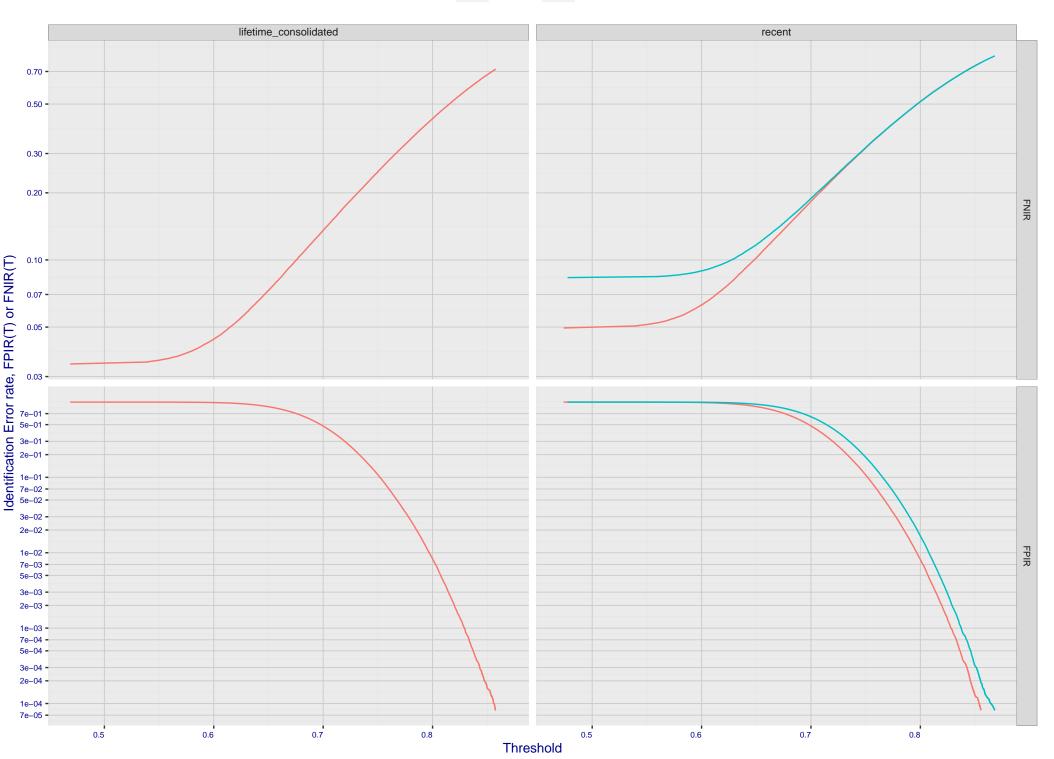
A: 1:N error tradeoff by dataset and enrollment type. N = 1600000 individuals Mugshot natural 0.7 -0.5 -False negative identification rate, FNIR(T) enrolment\_style recent-ONE-MATE 0.1 -1e-04 1e-03 1e-01 3e-01 3e-04

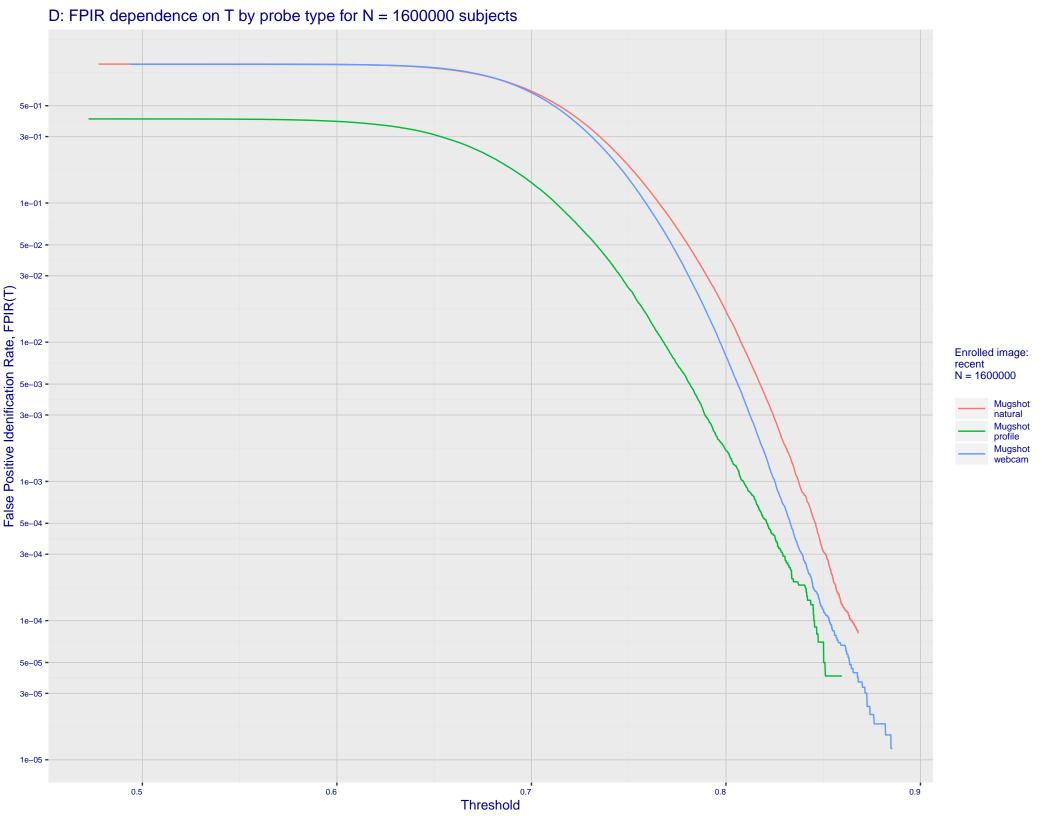
False positive identification rate, FPIR(T)

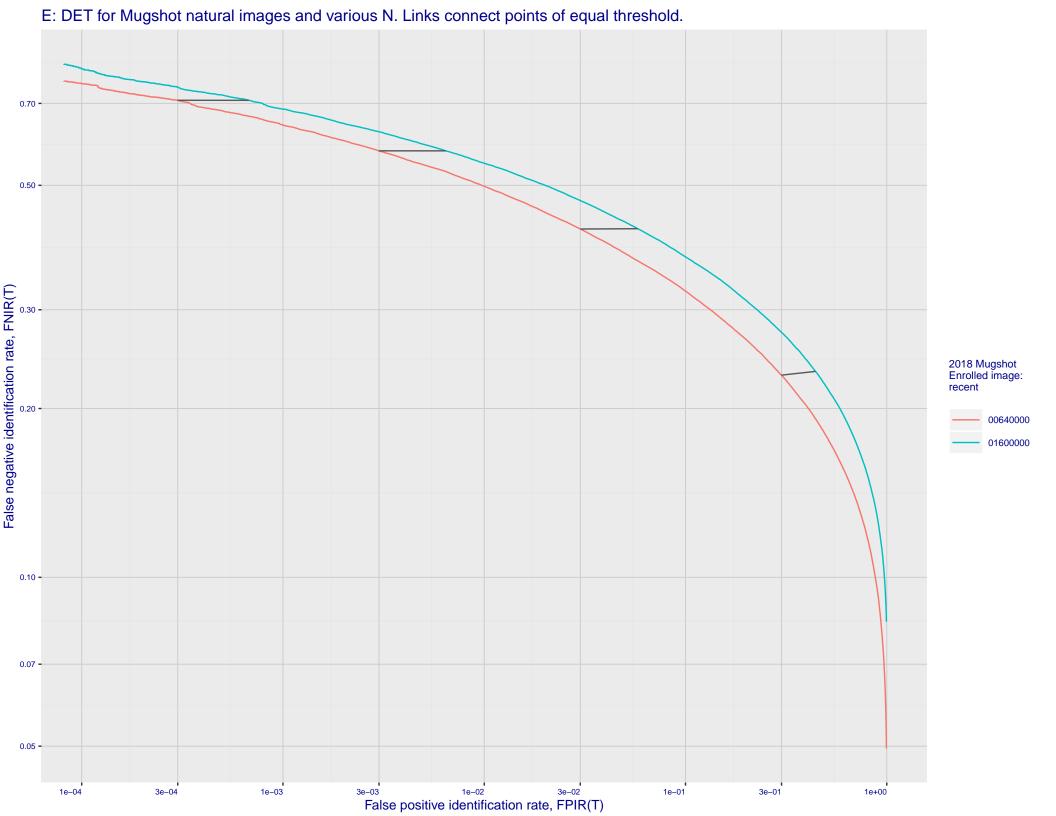
B: Dependence of error rates on T by number enrolled identities, N, for Mugshot natural images

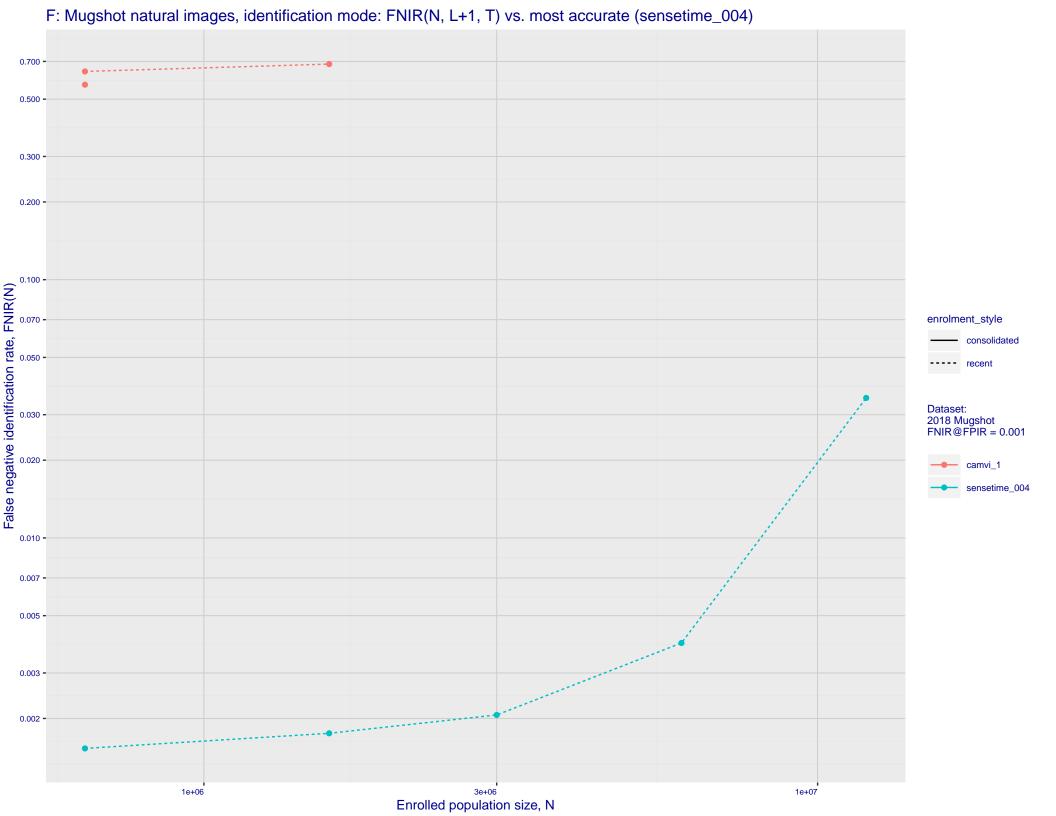




C: FPIR vs. Selectivity for mugshot images, N = 1600000 subjects enrolled with one recent mate 7e+01 5e+01 3e+01 2e+01 -1e+01 -7e+00 -5e+00 -3e+00 -2e+00 -1e+00 -7e-01 -5e-01 -3e-01 -2e-01 -1e-01 -Enrolled images: recent N = 1600000 7e-02 -7e-02 -7e-02 -3e-02 -3e-02 -1e-02 -7e-03 -Mugshot natural Mugshot profile 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: camvi\_1

Developer: Camvi Technologies

Submission Date: 2018\_02\_16

Template size: 1024 bytes

Template time (2.5 percentile): 168 msec

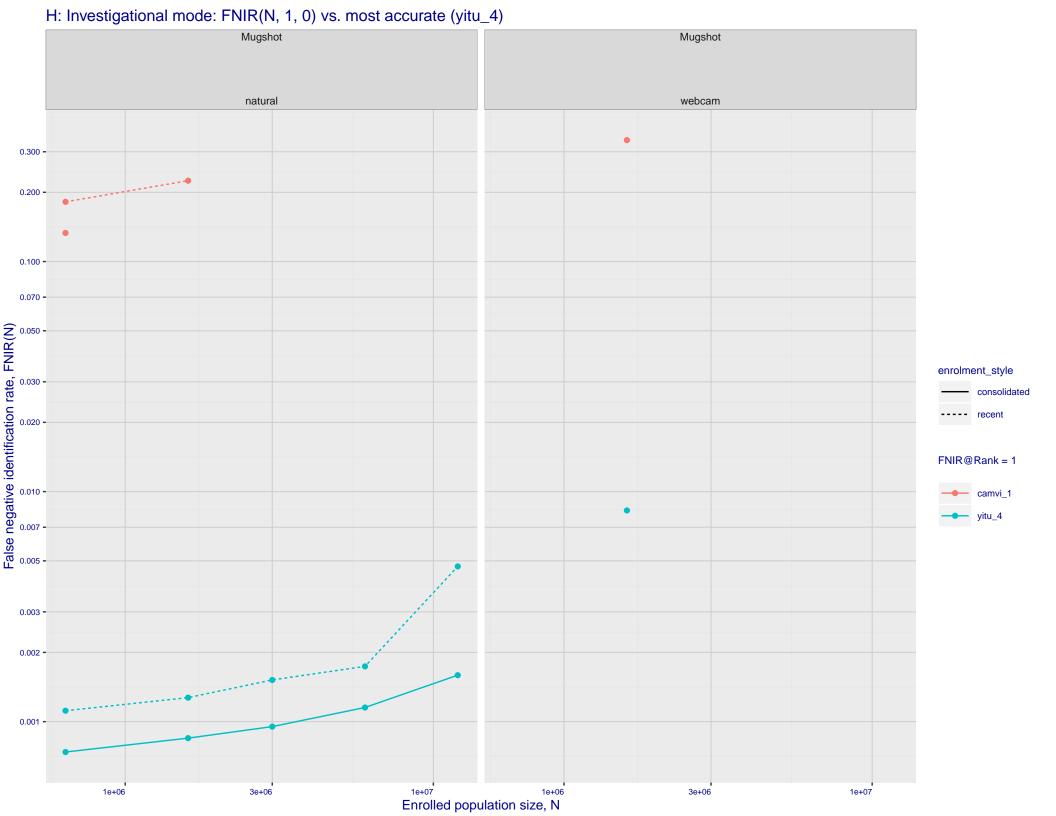
Template time (median): 176 msec

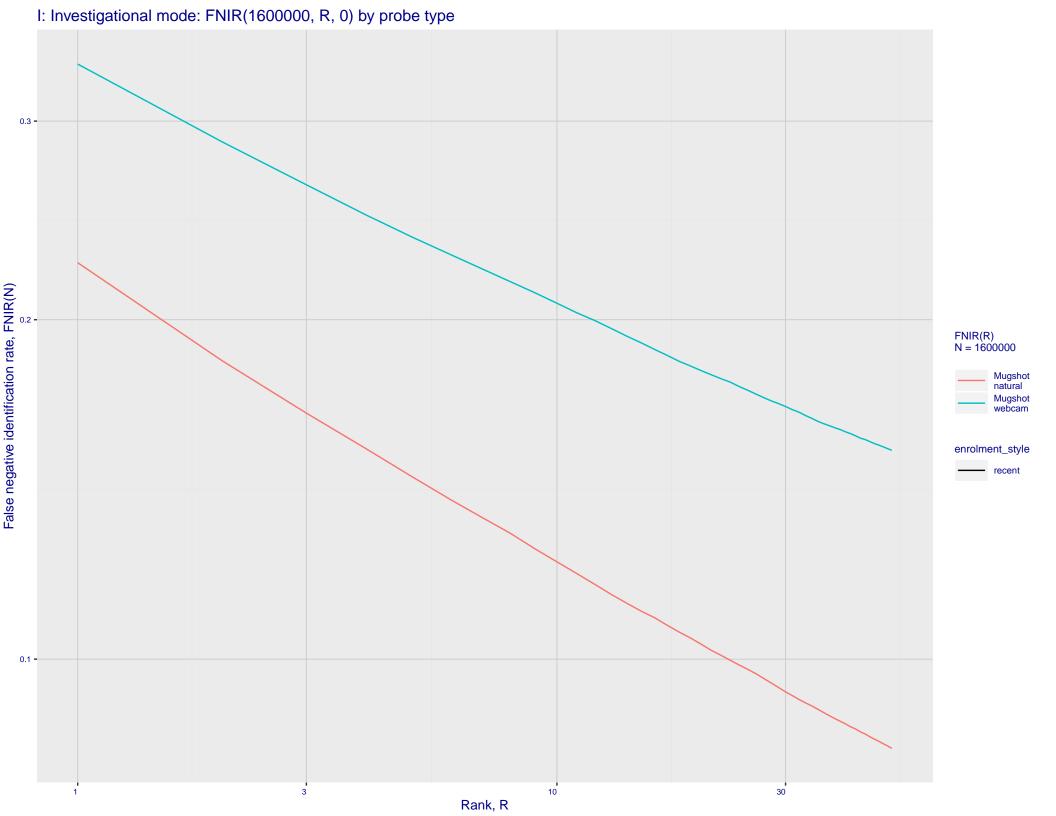
Template time (97.5 percentile): 188 msec

Frontal mugshot investigation rank 231 — FNIR(1600000, 0, 1) = 0.2247 vs. lowest 0.0010 from sensetime\_004 natural investigation rank 192 — FNIR(1600000, 0, 1) = 0.3371 vs. lowest 0.0067 from sensetime\_003 natural investigation rank 211 — FNIR(1600000, 0, 1) = 0.8639 vs. lowest 0.0492 from paravision\_005 natural investigation rank 211 — FNIR(1600000, 0, 1) = 0.8639 vs. lowest 0.0492 from paravision\_005

Frontal mugshot identification rank 223 — FNIR(1600000, T, L+1) = 0.6836 vs. lowest 0.0018 from sensetime\_004 natural identification rank 187 — FNIR(1600000, T, L+1) = 0.7694 vs. lowest 0.0122 from sensetime\_003

natural identification rank 60 -- FNIR(1600000, T, L+1) = 0.9718 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 100 -70 -Search Duration (milliseconds) 20 -7e+05 8e+05 Enrolled population size, N, one image per person