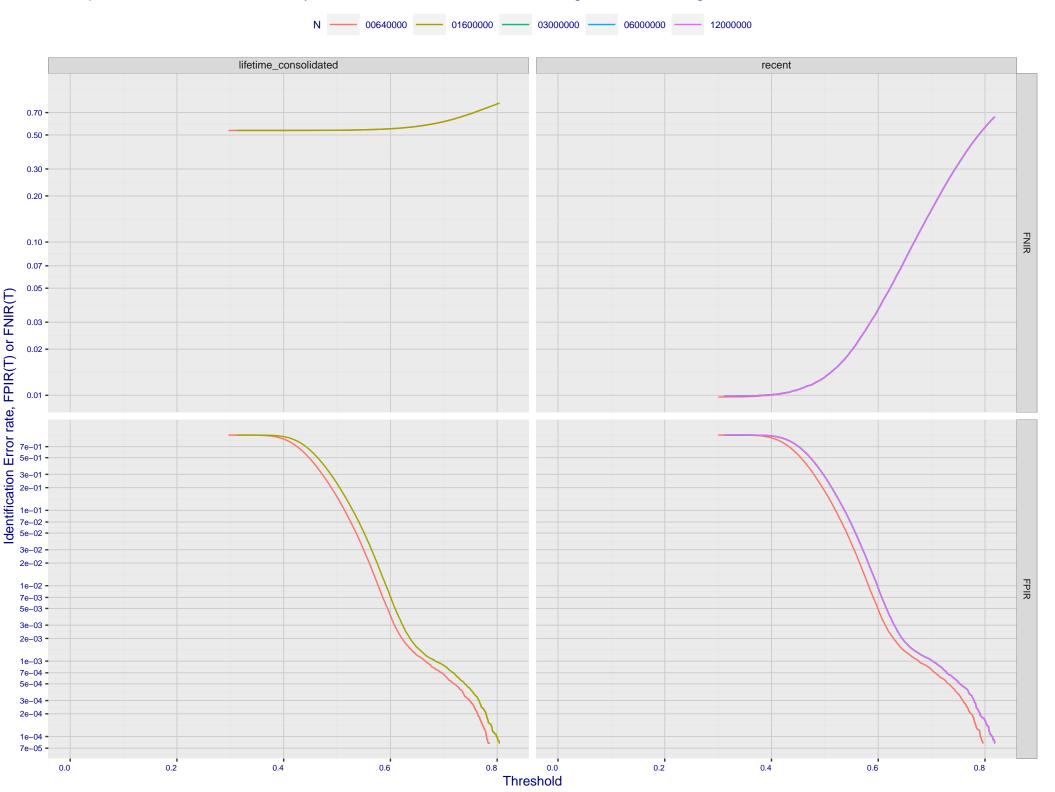
A: 1:N error tradeoff by dataset and enrollment type. N = 1600000 individuals Immigration Immigration Mugshot visa-border visa-kiosk natural 0.70 -0.50 -0.30 -False negative identification rate, FNIR(T) enrolment_style consolidated-ONE-MATE random-ONE-MATE recent-ONE-MATE unconsolidated-ALL-MATES unconsolidated-ANY-MATE 0.03 -0.02 -0.01 -

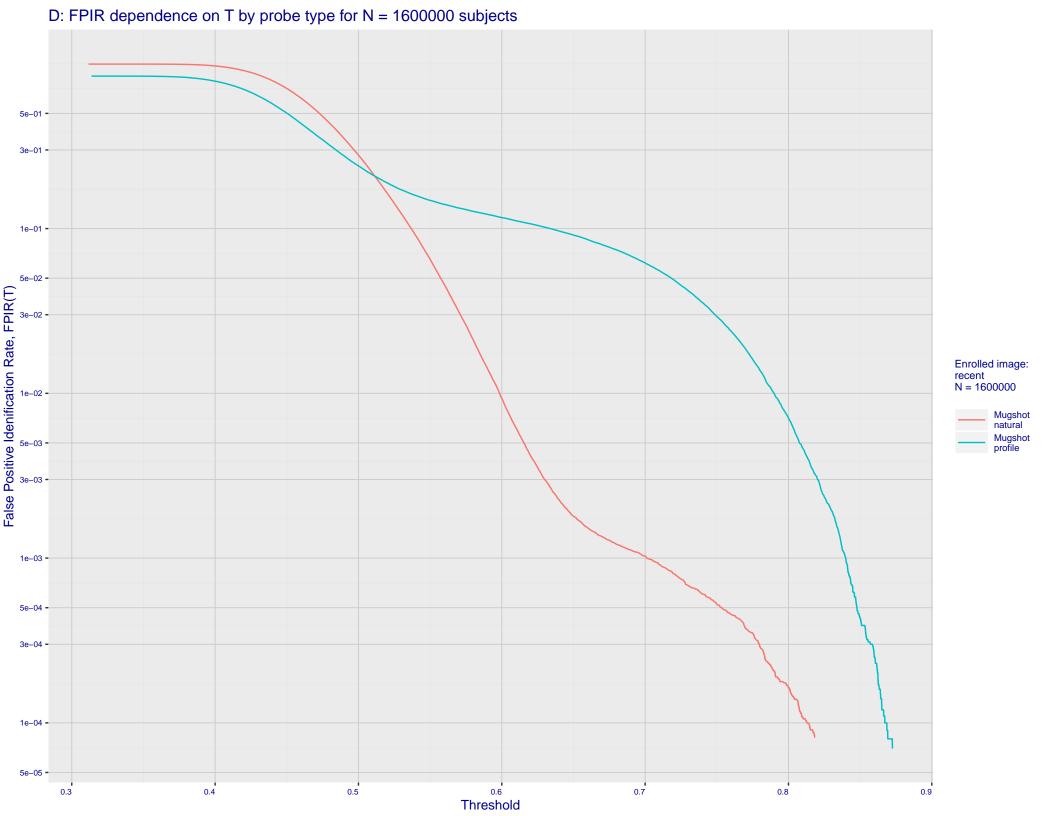
False positive identification rate, FPIR(T)

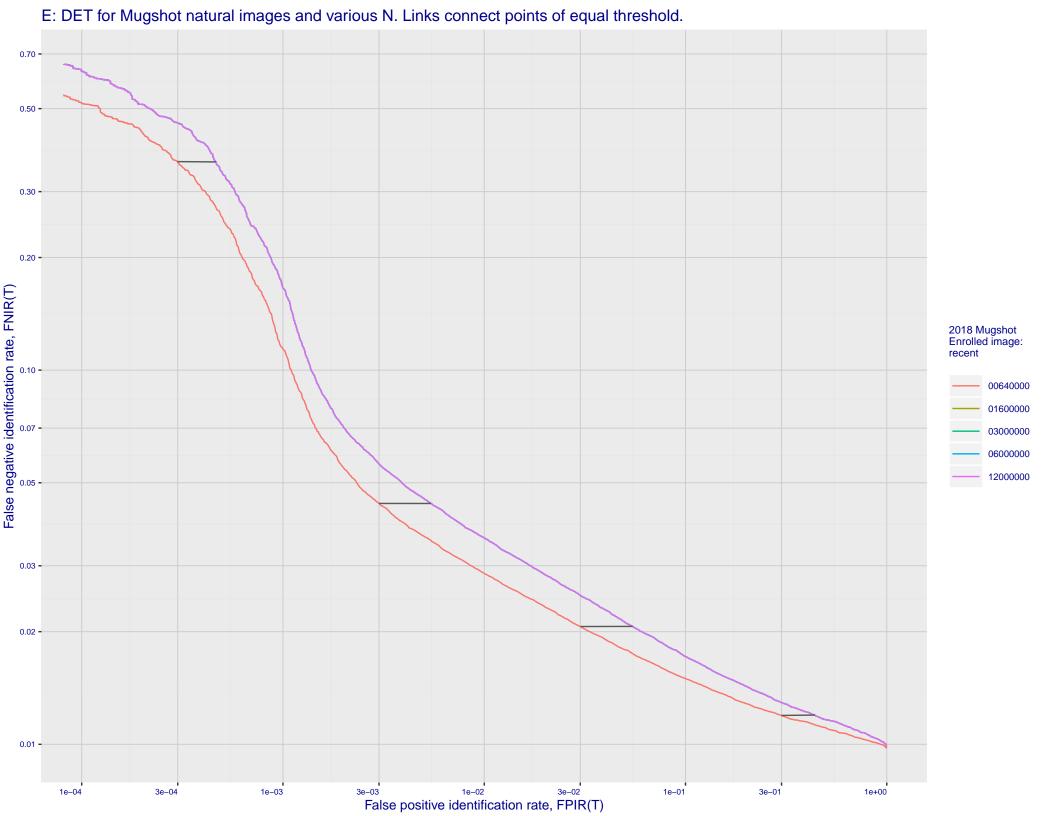
1e-04 3e-04 1e-03 3e-03 1e-02 3e-02 1e-01 3e-01 1e+00 1e-04 3e-04 1e-03 3e-03 1e-02 3e-02 1e-01 3e-01 1e+00 1e-04 3e-04 1e-03 3e-03 1e-02 3e-02 1e-01 3e-01 1e+00

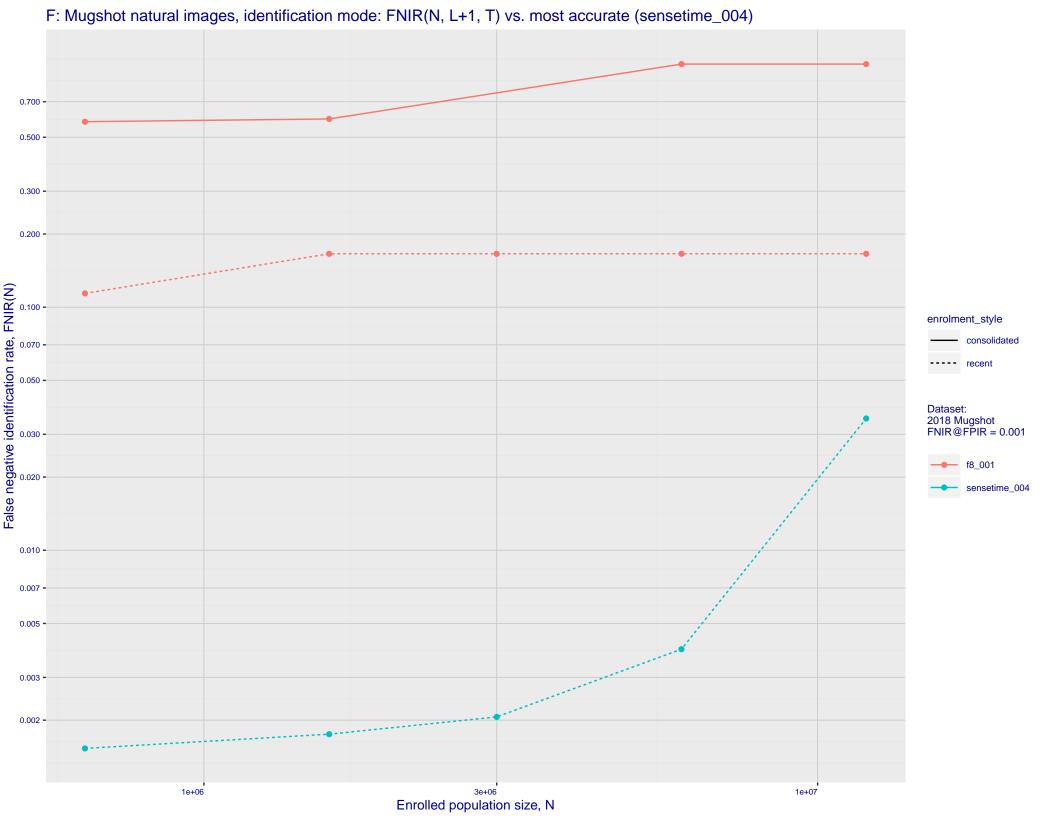
B: Dependence of error rates on T by number enrolled identities, N, for Mugshot natural images



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 = 1600000Mugshot natural Mugshot profile 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 **-**1e-03 1e-02 3e-01 1e-04 3e-04 1e-01 False Positive Idenification Rate, FPIR(T)







G: Datasheet

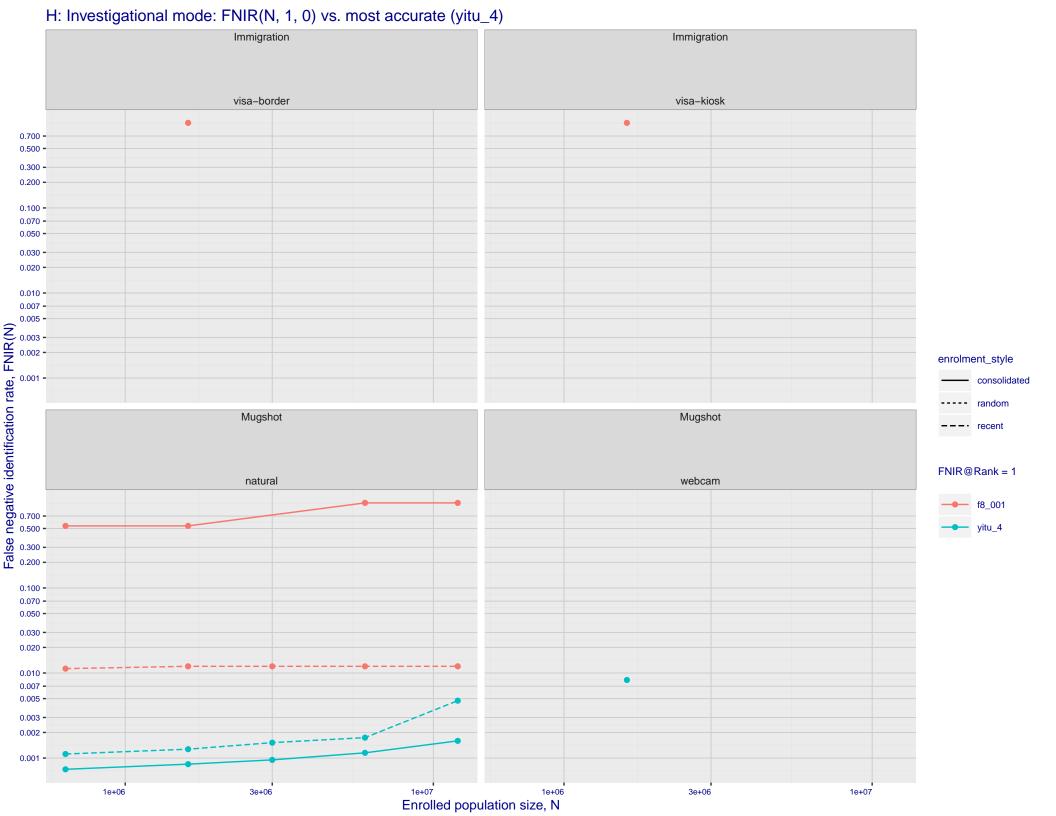
Algorithm: f8_001

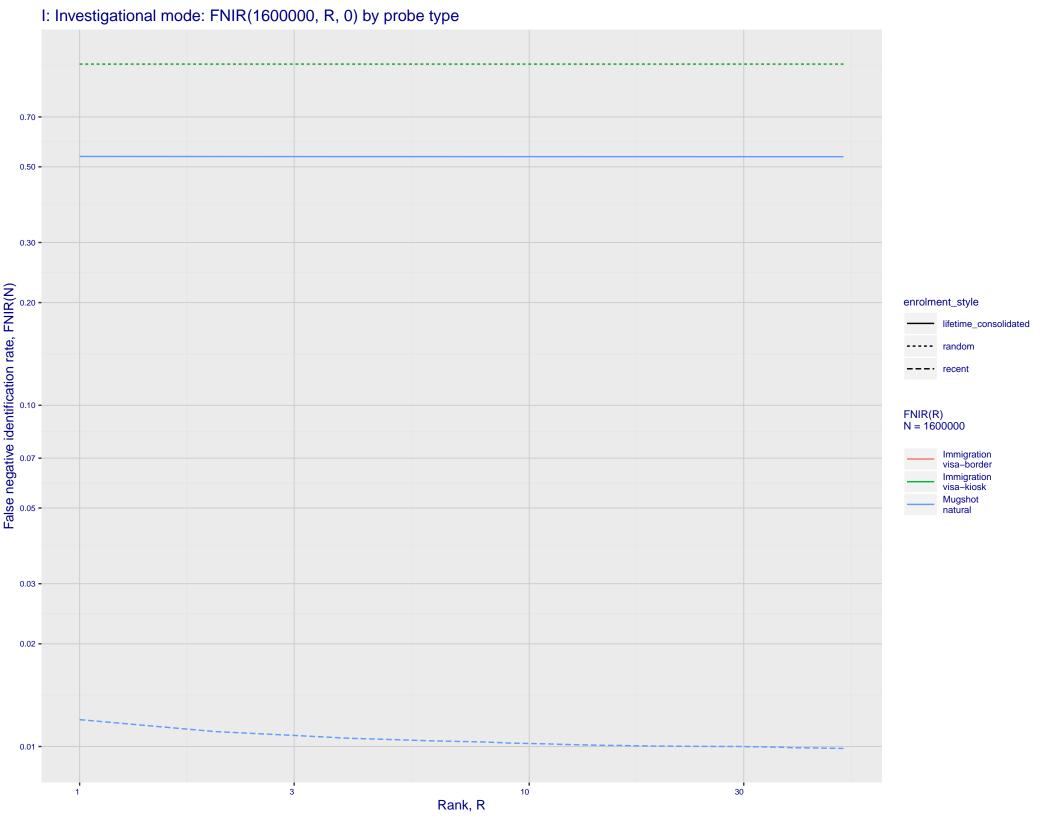
Developer: FarBar Inc

Submission Date: 2019_10_03

Frontal mugshot investigation rank 130 — FNIR(1600000, 0, 1) = 0.0120 vs. lowest 0.0010 from sensetime_004 natural investigation rank 106 — FNIR(1600000, 0, 1) = 0.5318 vs. lowest 0.0492 from paravision_005 natural investigation rank 106 — FNIR(1600000, 0, 1) = 0.5318 vs. lowest 0.0492 from paravision_005 natural investigation rank 104 — FNIR(1600000, 0, 1) = 1.0000 vs. lowest 0.0014 from visionlabs_009 natural investigation rank 102 — FNIR(1600000, 0, 1) = 1.0000 vs. lowest 0.0694 from cib_000

Frontal mugshot identification rank 151 — FNIR(1600000, T, L+1) = 0.1658 vs. lowest 0.0018 from sensetime_004 natural identification rank 99 — FNIR(1600000, T, L+1) = 1.0000 vs. lowest 0.0059 from sensetime_004 natural identification rank 95 — FNIR(1600000, T, L+1) = 1.0000 vs. lowest 0.1129 from visionlabs_009





	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
(spu	
nilliseco	
Search Duration (milliseconds)	
arch Du	
Se	
	Enrolled population size, N, one image per person