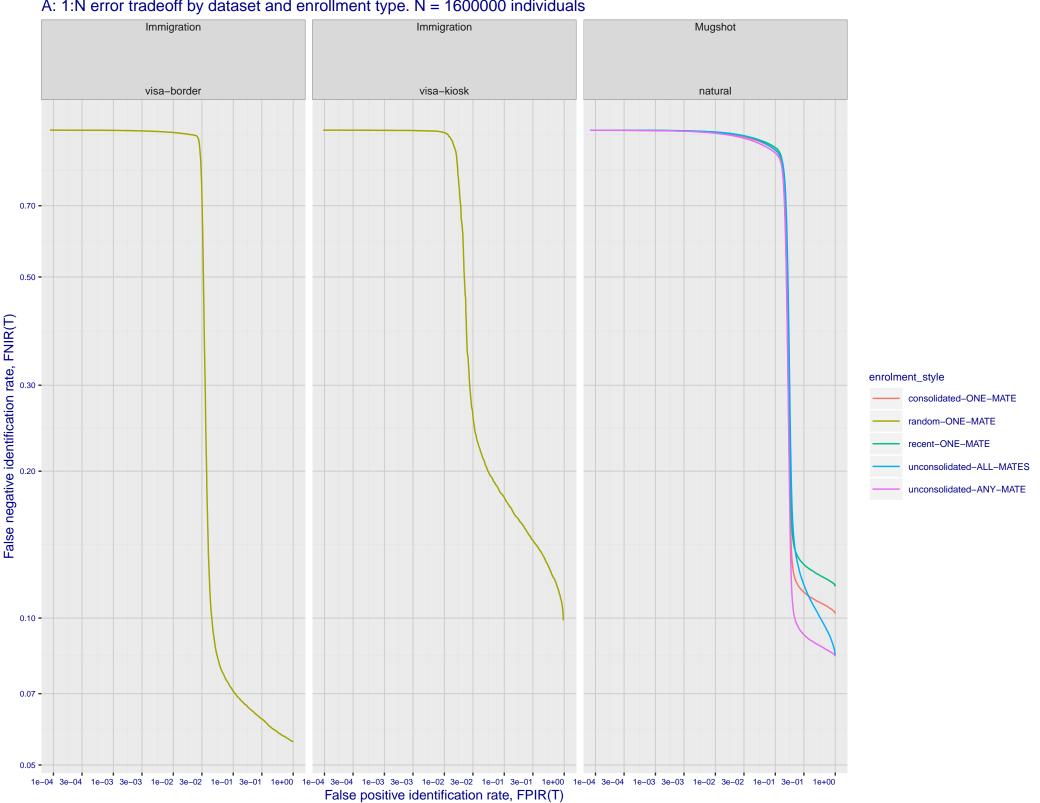
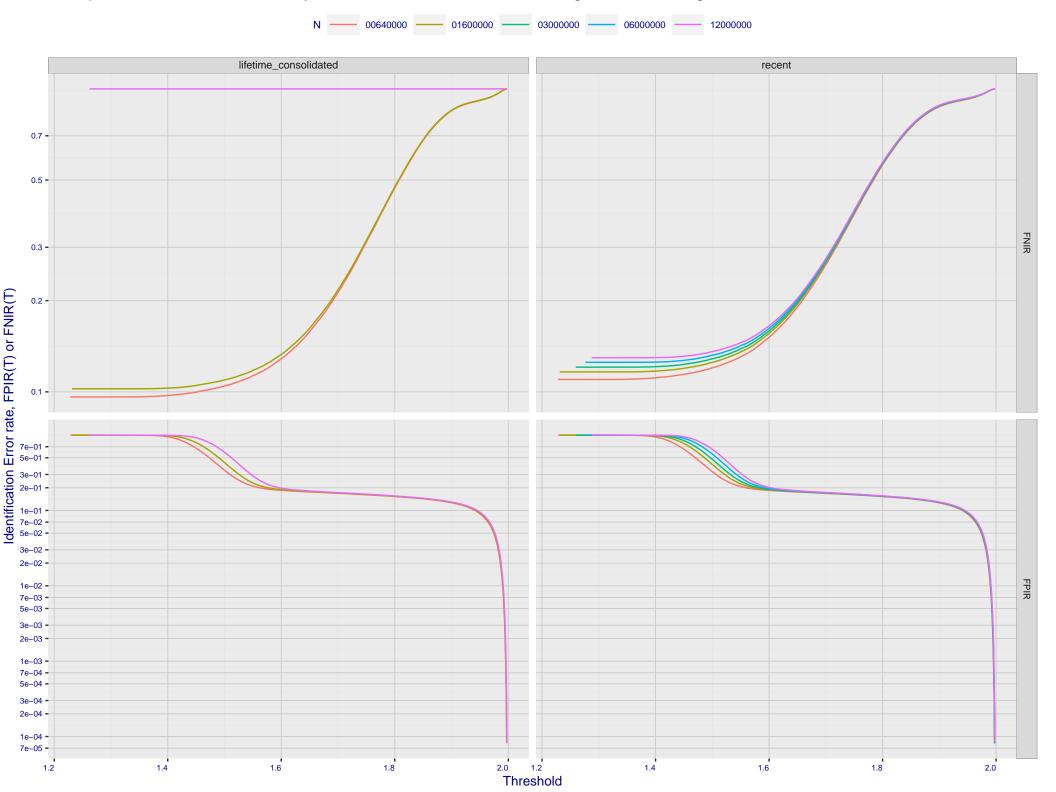
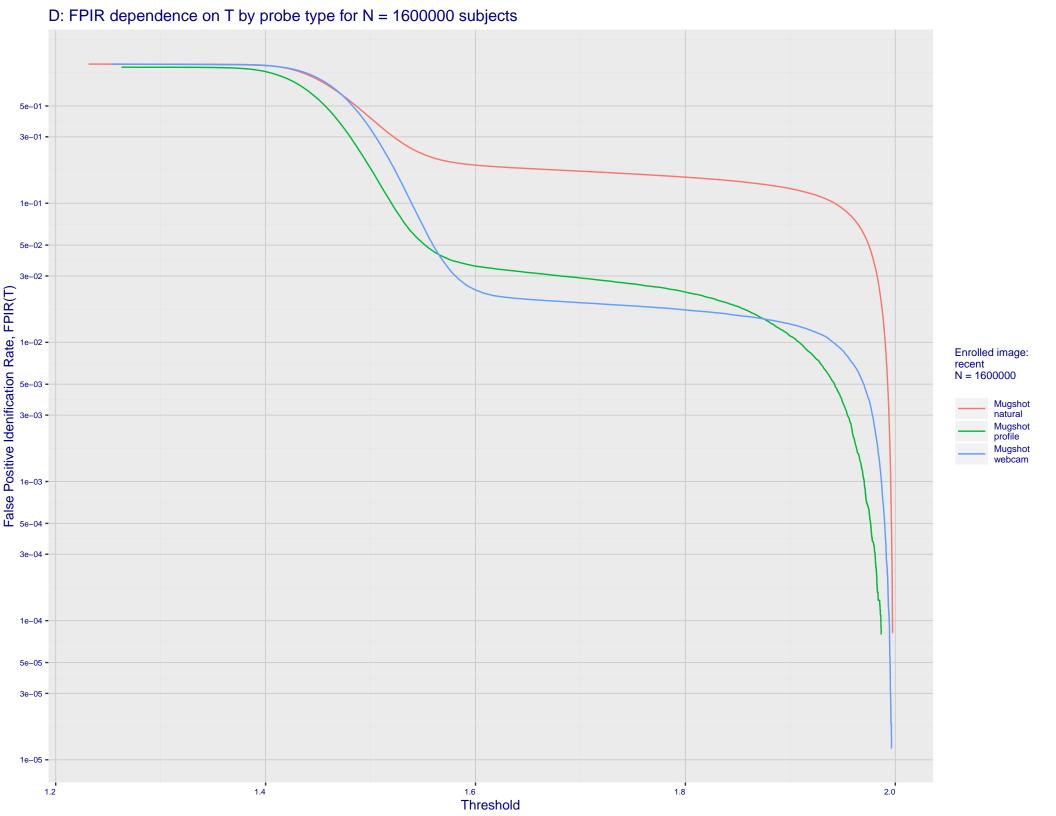
A: 1:N error tradeoff by dataset and enrollment type. N = 1600000 individuals

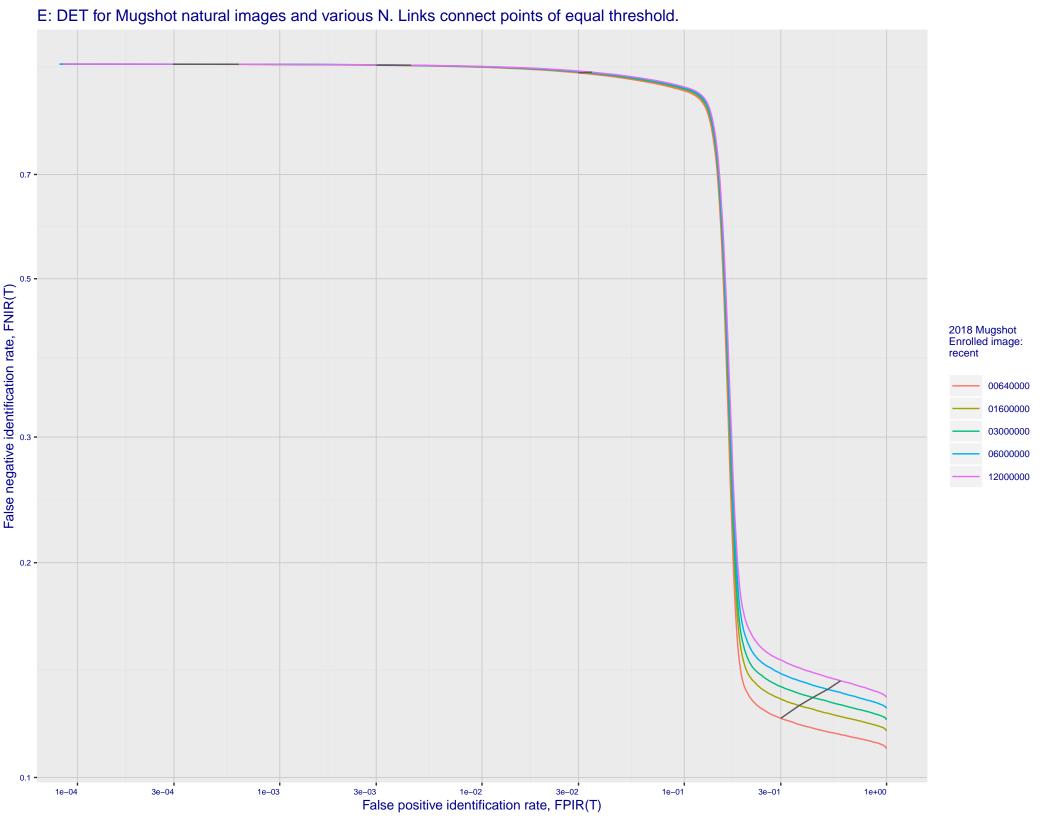


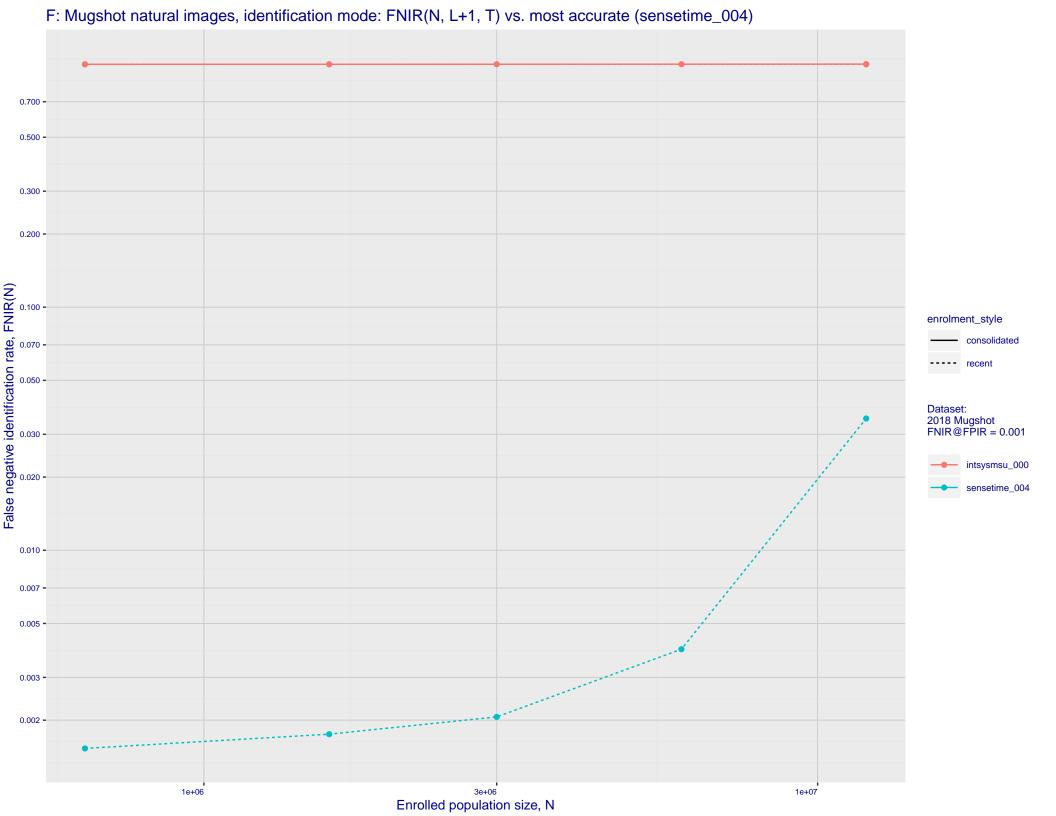
B: Dependence of error rates on T by number enrolled identities, N, for Mugshot natural images



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 O 1e-01 - 7e-02 - 7e-02 - 3e-02 - 2e-02 - 9S 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-03 1e-05 3e-05 1e-04 3e-04 1e-01 3e-01 False Positive Idenification Rate, FPIR(T)

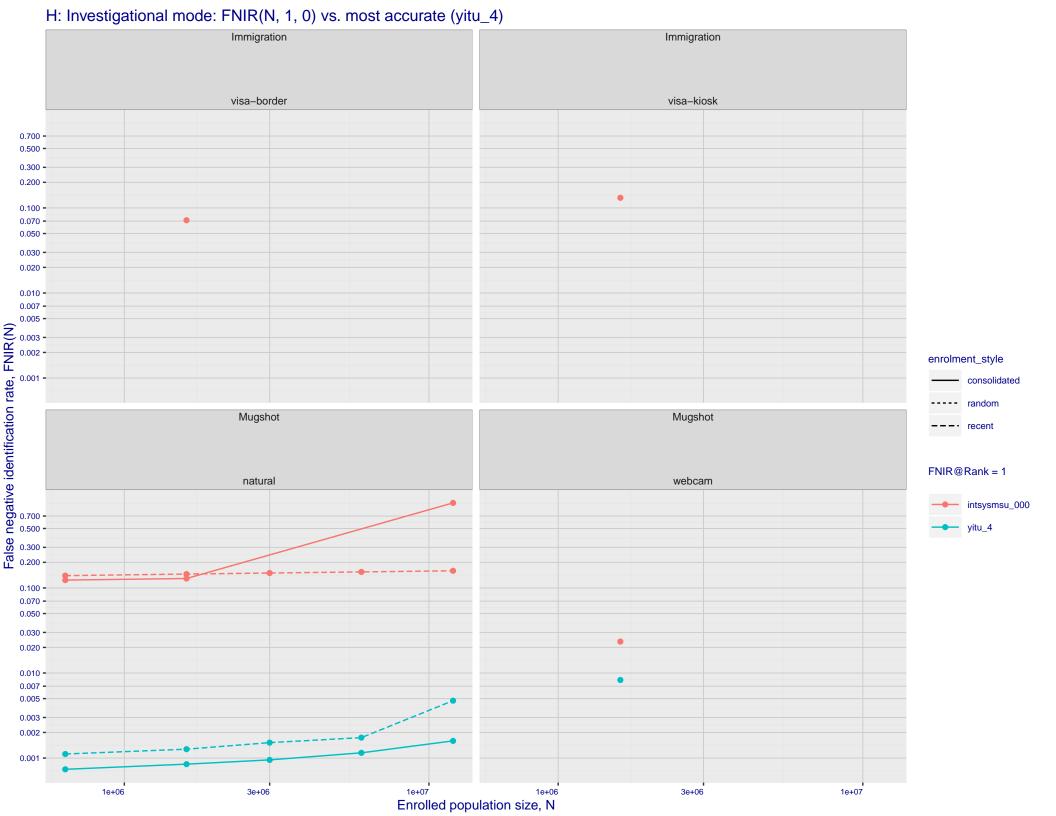


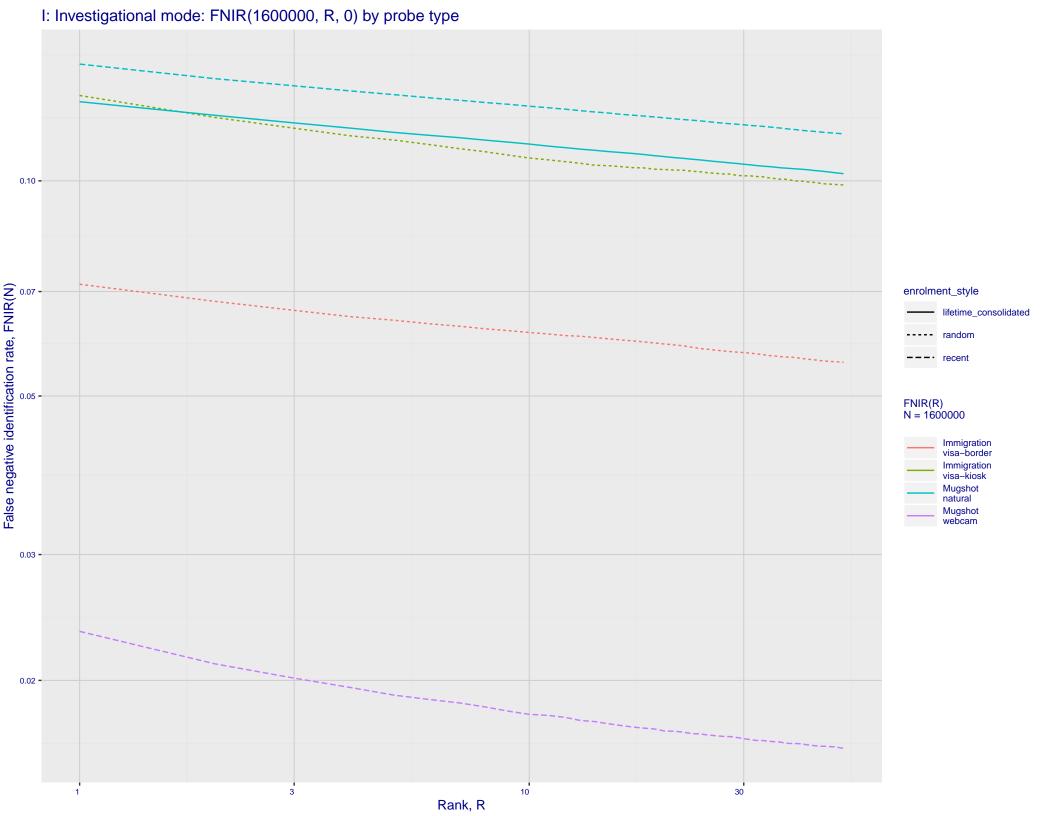




G: Datasheet

Algorithm: intsysmsu_000 Developer: Lomonosov Moscow State University Submission Date: 2019_08_19 Template size: 2048 bytes Template time (2.5 percentile): 611 msec Template time (median): 615 msec Template time (97.5 percentile): 1057 msec Frontal mugshot investigation rank 214 -- FNIR(1600000, 0, 1) = 0.1457 vs. lowest 0.0010 from sensetime_004 natural investigation rank 80 -- FNIR(1600000, 0, 1) = 0.0234 vs. lowest 0.0067 from sensetime_003 natural investigation rank 69 -- FNIR(1600000, 0, 1) = 0.3613 vs. lowest 0.0492 from paravision_005 natural investigation rank 69 -- FNIR(1600000, 0, 1) = 0.3613 vs. lowest 0.0492 from paravision_005 natural investigation rank 81 -- FNIR(1600000, 0, 1) = 0.0717 vs. lowest 0.0014 from visionlabs_009 natural investigation rank 39 -- FNIR(1600000, 0, 1) = 0.1317 vs. lowest 0.0694 from cib_000 Frontal mugshot identification rank 247 -- FNIR(1600000, T, L+1) = 0.9983 vs. lowest 0.0018 from sensetime_004 natural identification rank 207 -- FNIR(1600000, T, L+1) = 0.9997 vs. lowest 0.0122 from sensetime_003 natural identification rank 150 -- FNIR(1600000, T, L+1) = 0.9998 vs. lowest 0.1020 from sensetime_004 natural identification rank 94 -- FNIR(1600000, T, L+1) = 0.9988 vs. lowest 0.0059 from sensetime_004 natural identification rank 90 -- FNIR(1600000, T, L+1) = 0.9990 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

