A: Datasheet

Algorithm: microfocus_0

Developer: MicroFocus

Submission Date: 2018_02_12

Template size: 256 bytes

Template time (2.5 percentile): 416 msec

Template time (median): 527 msec

Template time (97.5 percentile): 631 msec

Investigation:

Frontal mugshot ranking 260 (out of 265) -- FNIR(1600000, 0, 1) = 0.5961 vs. lowest 0.0009 from sensetime_005

Mugshot webcam ranking 224 (out of 227) -- FNIR(1600000, 0, 1) = 0.7823 vs. lowest 0.0062 from sensetime_005

Immigration visa-border ranking 136 (out of 148) -- FNIR(1600000, 0, 1) = 0.7130 vs. lowest 0.0013 from visionlabs_010

Immigration visa-kiosk ranking 138 (out of 145) -- FNIR(1600000, 0, 1) = 0.9121 vs. lowest 0.0568 from hr_000

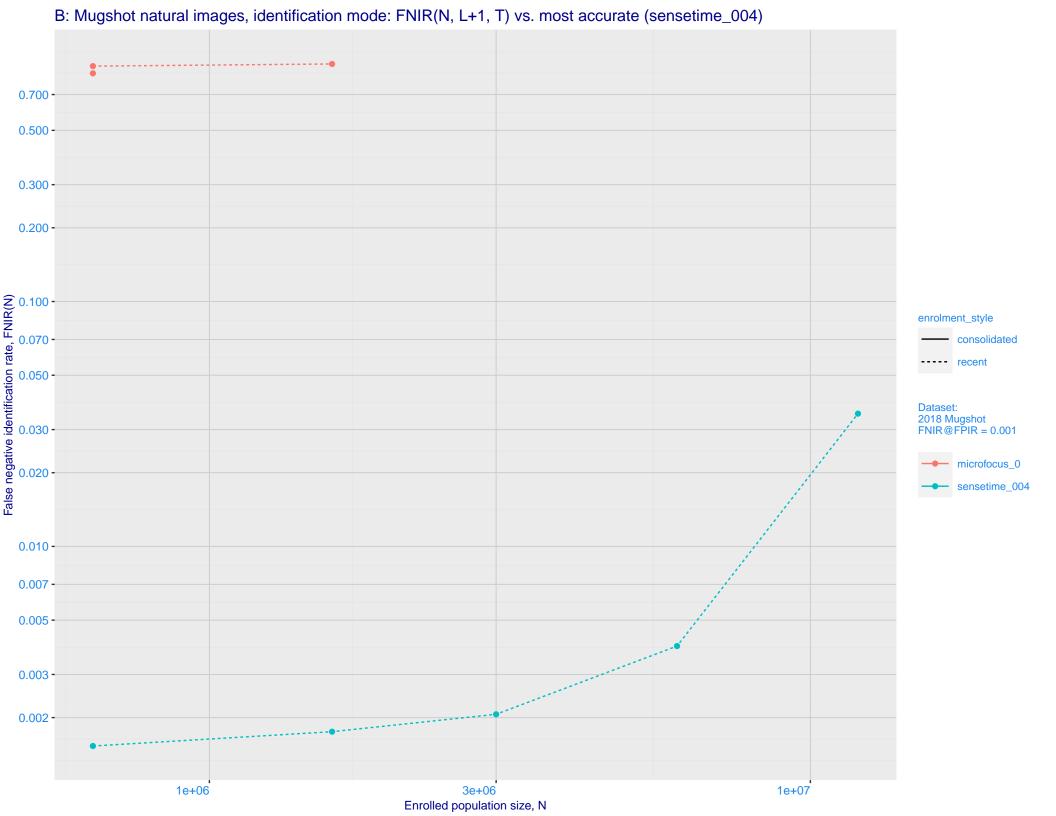
Identification:

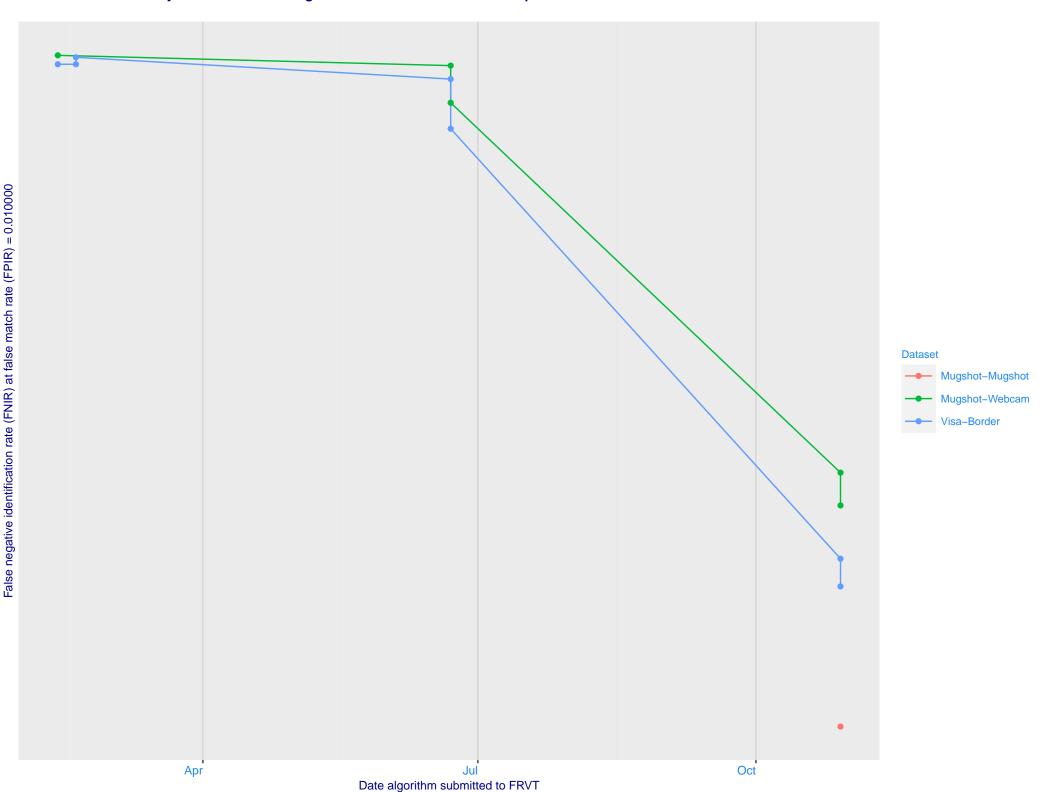
Frontal mugshot ranking 252 (out of 265) -- FNIR(1600000, T, L+1) = 0.9332, FPIR=0.001000 vs. lowest 0.0018 from sensetime_004

Mugshot webcam ranking 219 (out of 225) -- FNIR(1600000, T, L+1) = 0.9849, FPIR=0.001000 vs. lowest 0.0122 from sensetime_003

Immigration visa-border ranking 132 (out of 146) -- FNIR(1600000, T, L+1) = 0.9844, FPIR=0.001000 vs. lowest 0.0049 from hr_000

Immigration visa-kiosk ranking 125 (out of 141) -- FNIR(1600000, T, L+1) = 0.9931, FPIR=0.001000 vs. lowest 0.0996 from hr_000

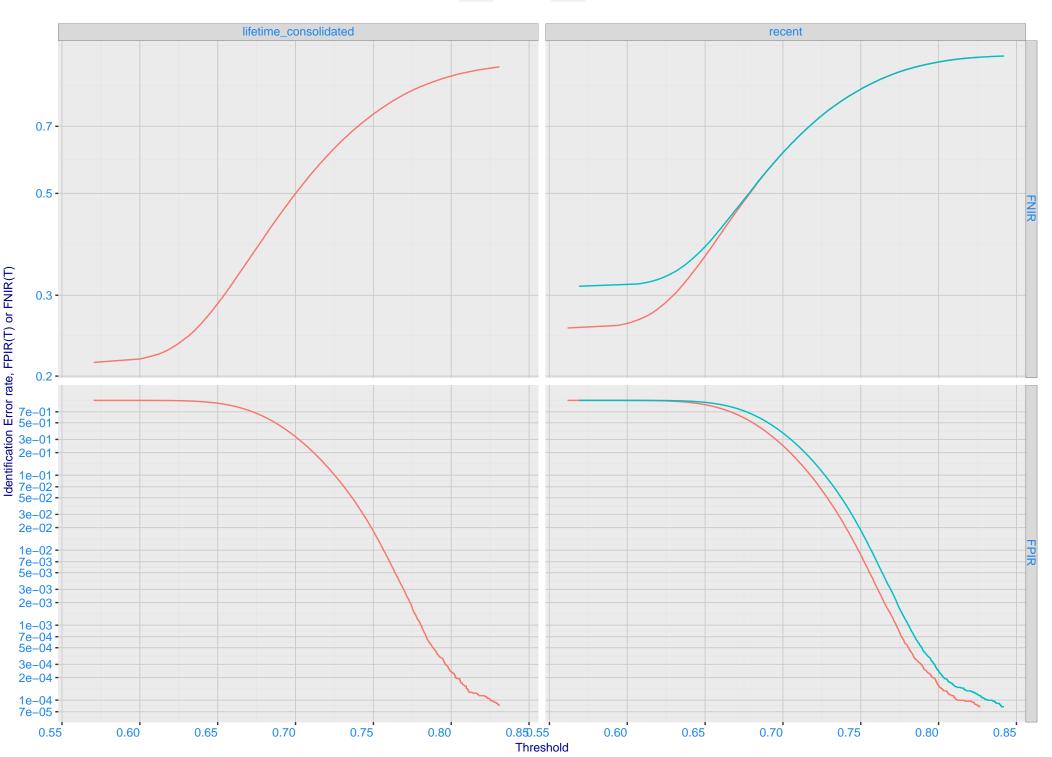




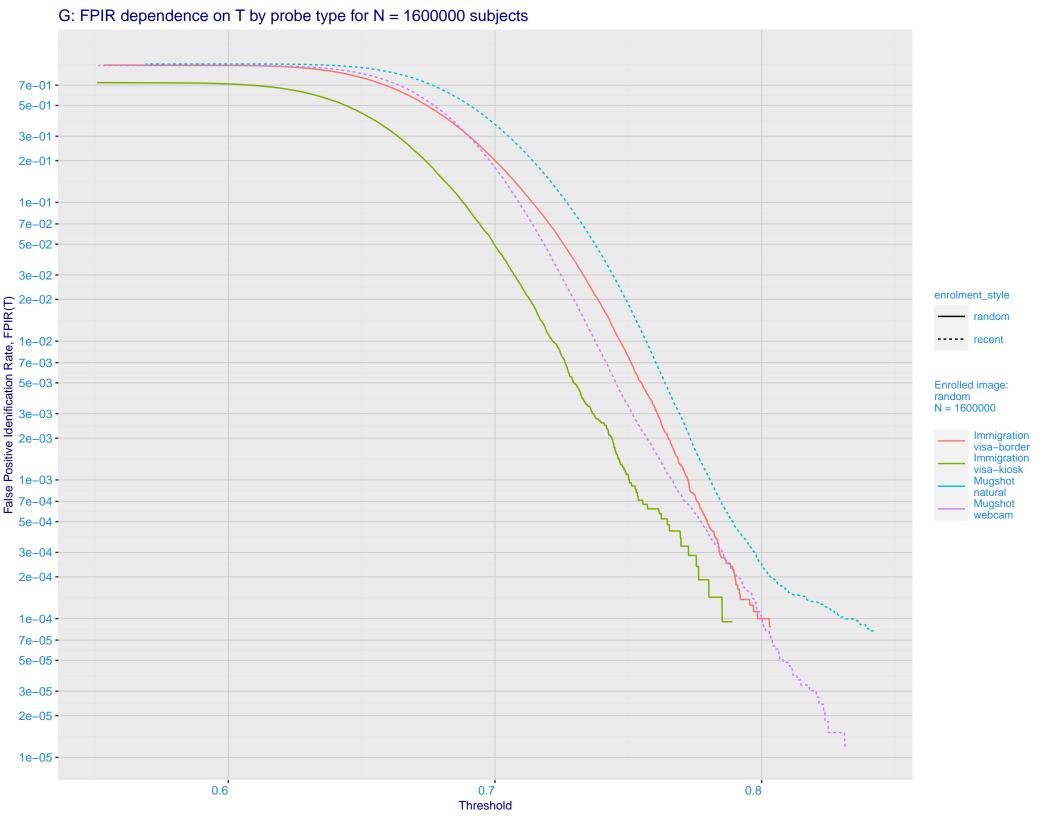
D: 1:N error tradeoff by dataset and enrollment type. N = 1600000 individuals Immigration Immigration Mugshot visa-border visa-kiosk natural 0.700 -0.500 -0.300 -0.200 -0.100 -0.070 -0.050 -0.030 -0.020 -0.010 -0.007 - 0.005 - 0.005 - 0.002 - 0.001 - 0.001 - 0.700 - 0.500 - 0.200 enrolment_style random-ONE-MATE recent-ONE-MATE 0.100 -0.070 -0.050 -0.030 -0.020 -0.010 -0.007 -0.005 -0.003 -0.002 -0.001 -False positive identification rate, FPIR(T)

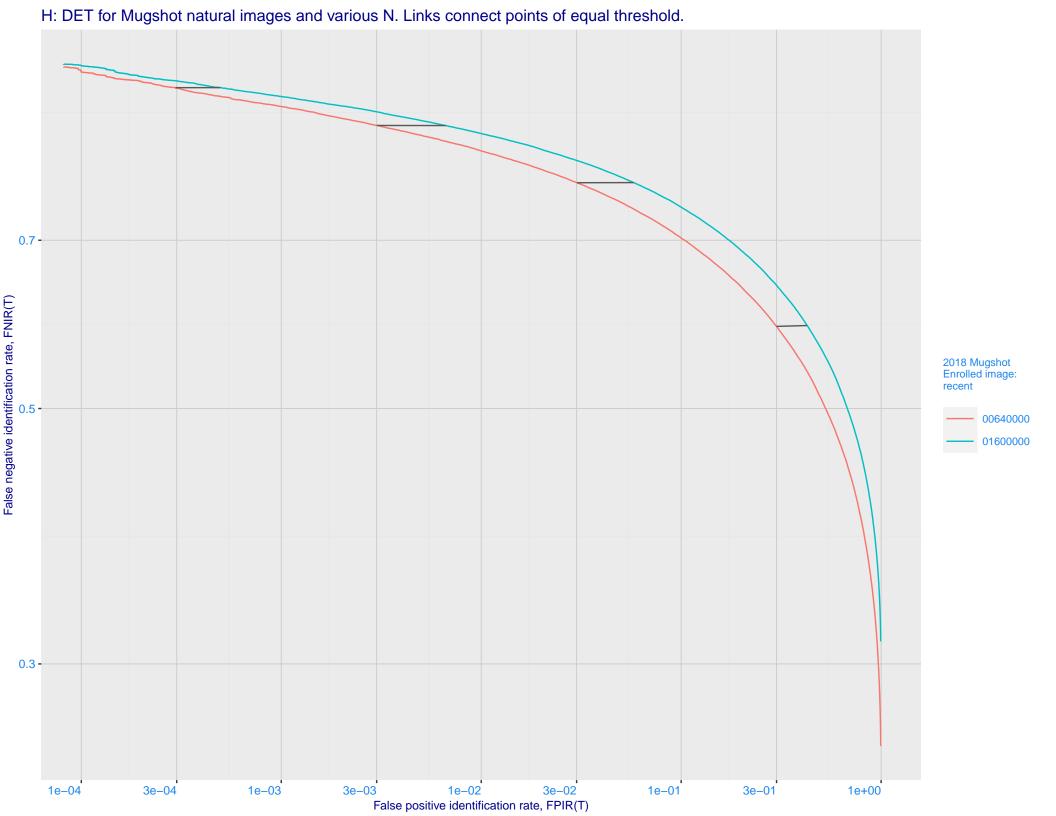
E: Dependence of error rates on T by number enrolled identities, N, for Mugshot natural images



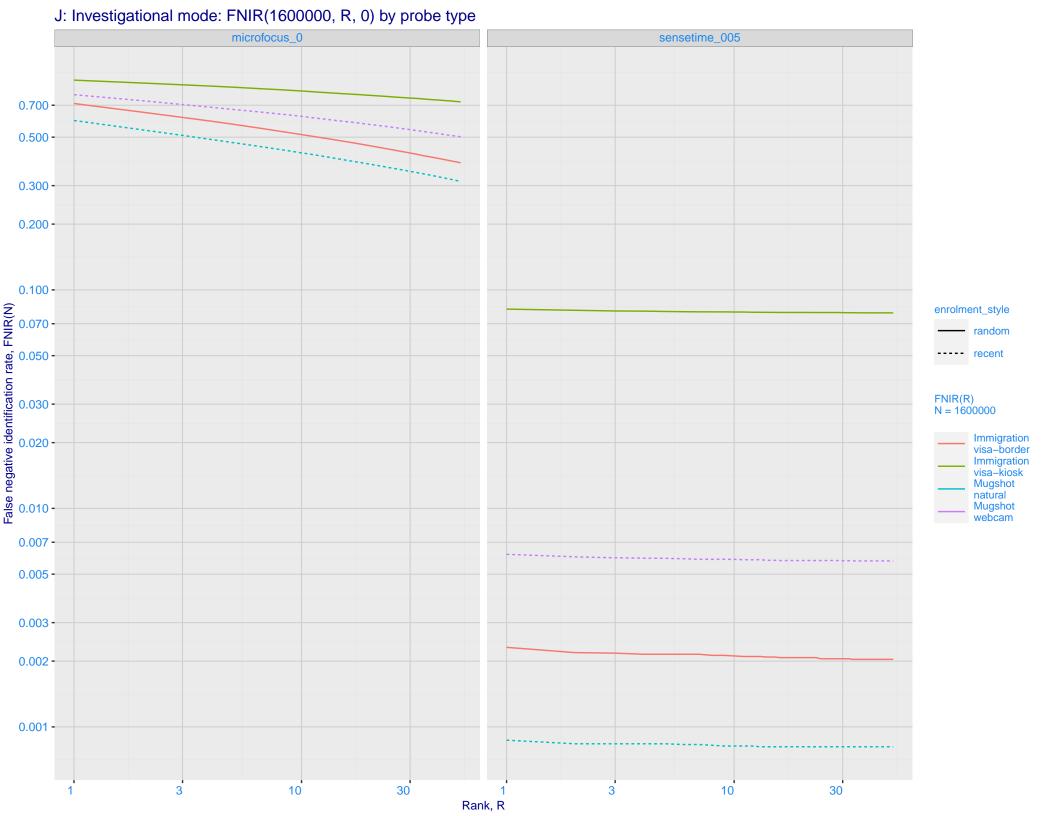


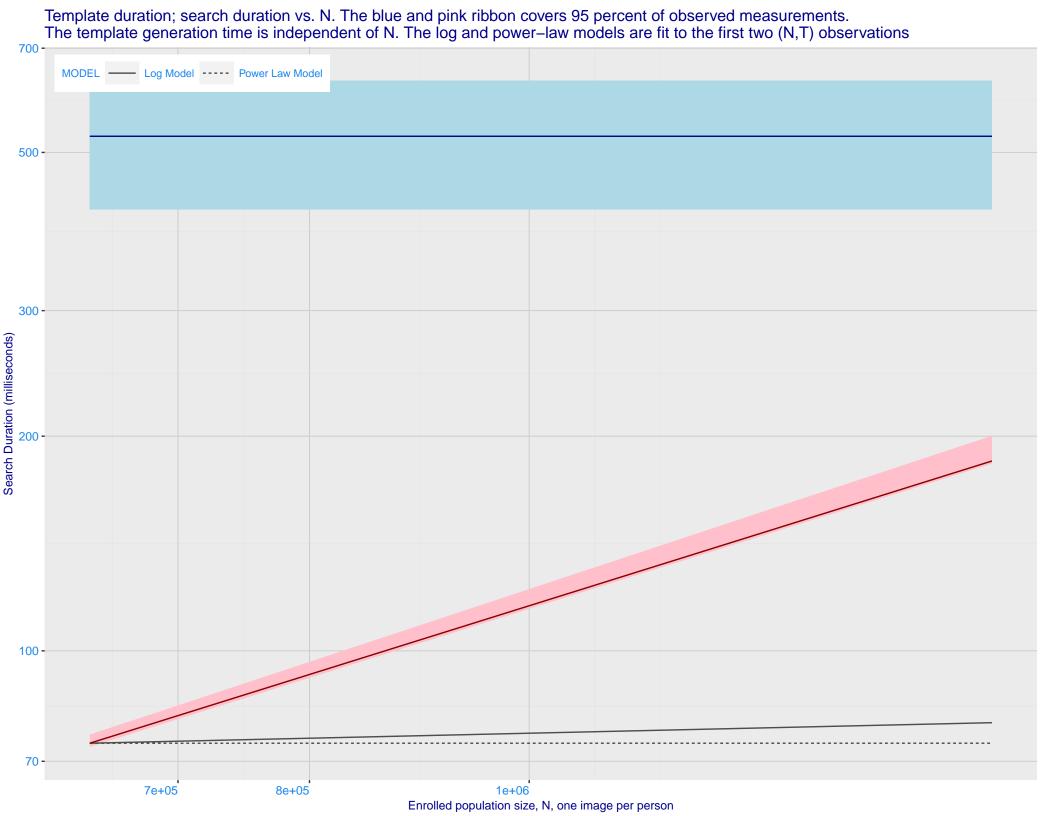
F: FPIR vs. Selectivity for mugshot images, N = 1600000 subjects enrolled with one recent mate 7e+01 -5e+01 -3e+01 -2e+01 -1e+01 -7e+00 -5e+00 -3e+00 -2e+00 -1e+00 -7e-01 -5e-01 -3e-01 -2e-01 -1e-01 -7e-02 -5e-02 -3e-02 -3e-02 -1e-02 -**Enrolled images:** recent N = 1600000 Mugshot natural Mugshot webcam 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-03 3e-03 1e-02 3e-02 1e-01 3e-01 False Positive Idenification Rate, FPIR(T)





I: Investigational mode: FNIR(N, 1, 0) vs. most accurate (sensetime_005) Immigration **Immigration** visa-border visa-kiosk 0.700 -0.500 -0.300 -0.200 -0.100 -0.070 -0.050 -0.030 -0.020 -0.010 -0.007 -0.007 - 0.005 - 0.005 - 0.000 - 0.000 - 0.001 - 0.001 - 0.000 - 0.300 - 0.300 - 0.300 - 0.200 - 0.200 - 0.300 - 0.200 - 0.300 - 0.200 - 0.300 - 0.200 - 0.300 - 0.200 - 0.300 - 0.200 - 0.200 - 0.300 - 0.200 - 0.300 - 0.200 - 0.300 - 0.200 - 0.300 - 0.200 - 0.300 - 0.200 - 0.300 - 0.200 - 0.200 - 0.300 - 0.200 enrolment_style consolidated ---- random --- recent Mugshot webcam Mugshot natural FNIR@Rank = 1 microfocus_0 sensetime_005 0.100 -0.070 -0.050 -0.030 -0.020 -0.010 -0.007 -0.005 -0.003 -0.002 -0.001 -1e+06 3e+06 1e+07 1e+06 3e+06 1e+07 Enrolled population size, N





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



