A: Datasheet

Algorithm: dahua_0

Developer: Dahua Technology Co Ltd

Submission Date: 2018_10_29

Template size: 2048 bytes

Template time (2.5 percentile): 361 msec

Template time (median): 375 msec

Template time (97.5 percentile): 407 msec

Investigation:

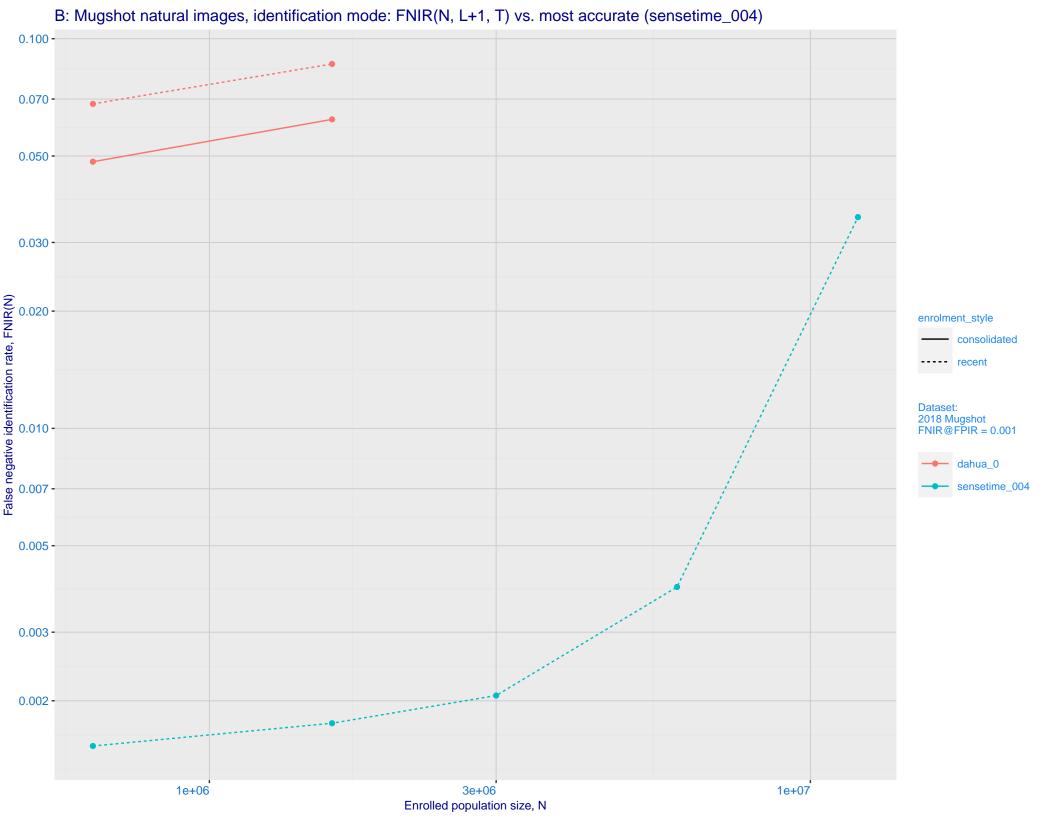
Frontal mugshot ranking 134 (out of 279) -- FNIR(1600000, 0, 1) = 0.0093 vs. lowest 0.0009 from sensetime_005

Mugshot webcam ranking 114 (out of 241) -- FNIR(1600000, 0, 1) = 0.0260 vs. lowest 0.0062 from sensetime_005

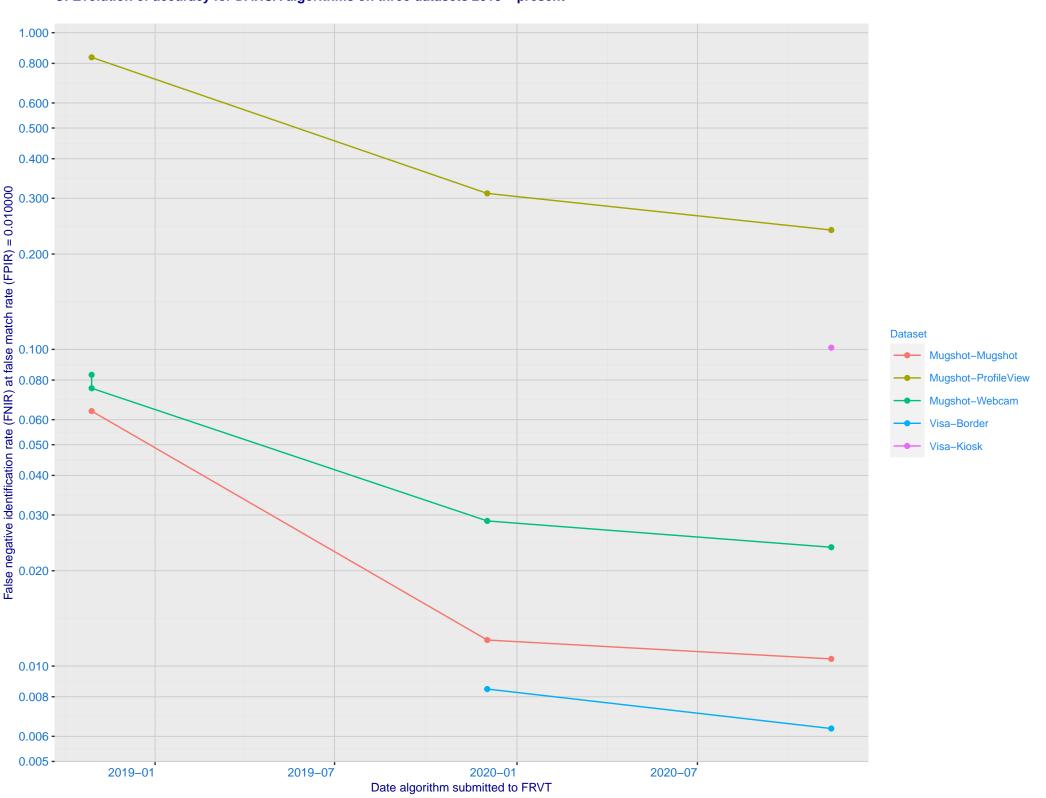
Identification:

Frontal mugshot ranking 133 (out of 279) -- FNIR(1600000, T, L+1) = 0.0861, FPIR=0.001000 vs. lowest 0.0018 from sensetime_004

Mugshot webcam ranking 104 (out of 236) -- FNIR(1600000, T, L+1) = 0.1352, FPIR=0.001000 vs. lowest 0.0122 from sensetime_003



C: Evolution of accuracy for DAHUA algorithms on three datasets 2018 – present

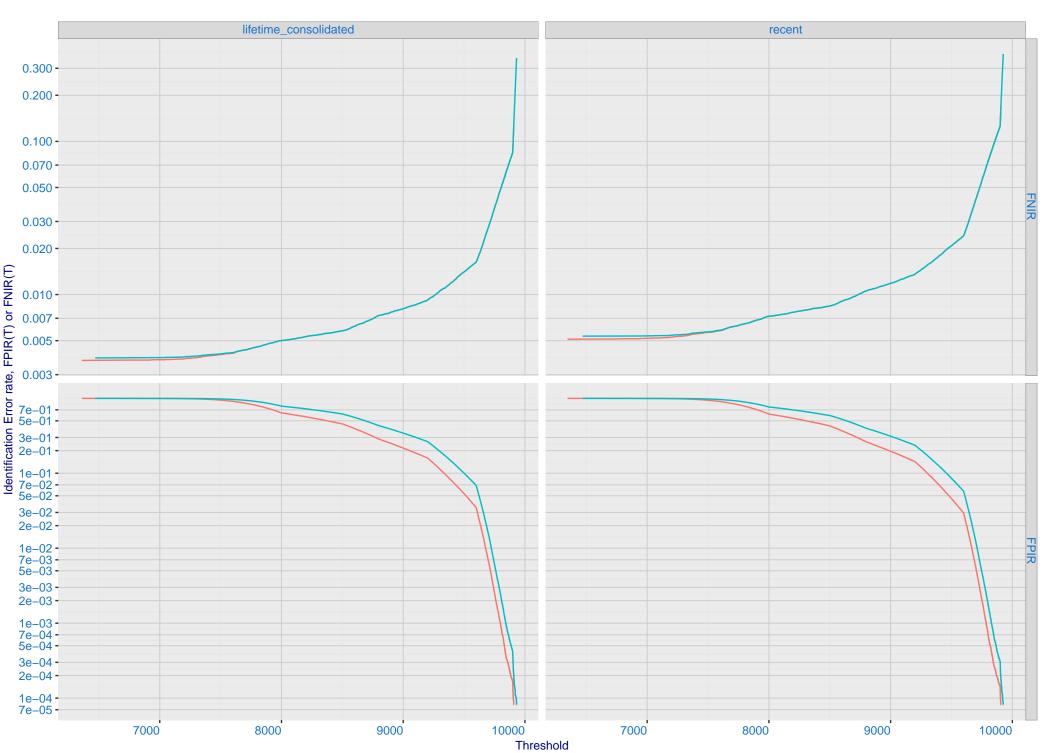


D: 1:N error tradeoff by dataset and enrollment type. N = 1600000 individuals **Immigration** Immigration Mugshot visa-border visa-kiosk natural 0.700 -0.500 -0.300 -0.200 -0.100 -0.070 -0.050 dahua 0 0.030 -0.020 -0.010 -0.007 -Ealse negative identification rate, FNIR(T) 0.003 - 0.002 - 0.001 - 0.500 - 0.500 - 0.200 - 0. enrolment_style consolidated-ONE-MATE random-ONE-MATE recent-ONE-MATE unconsolidated-ALL-MATES unconsolidated-ANY-MATE 0.100 -0.070 sensetime 004 0.050 -0.030 -0.020 -0.010 -0.007 -0.005 -0.003 -0.002 -0.001 -

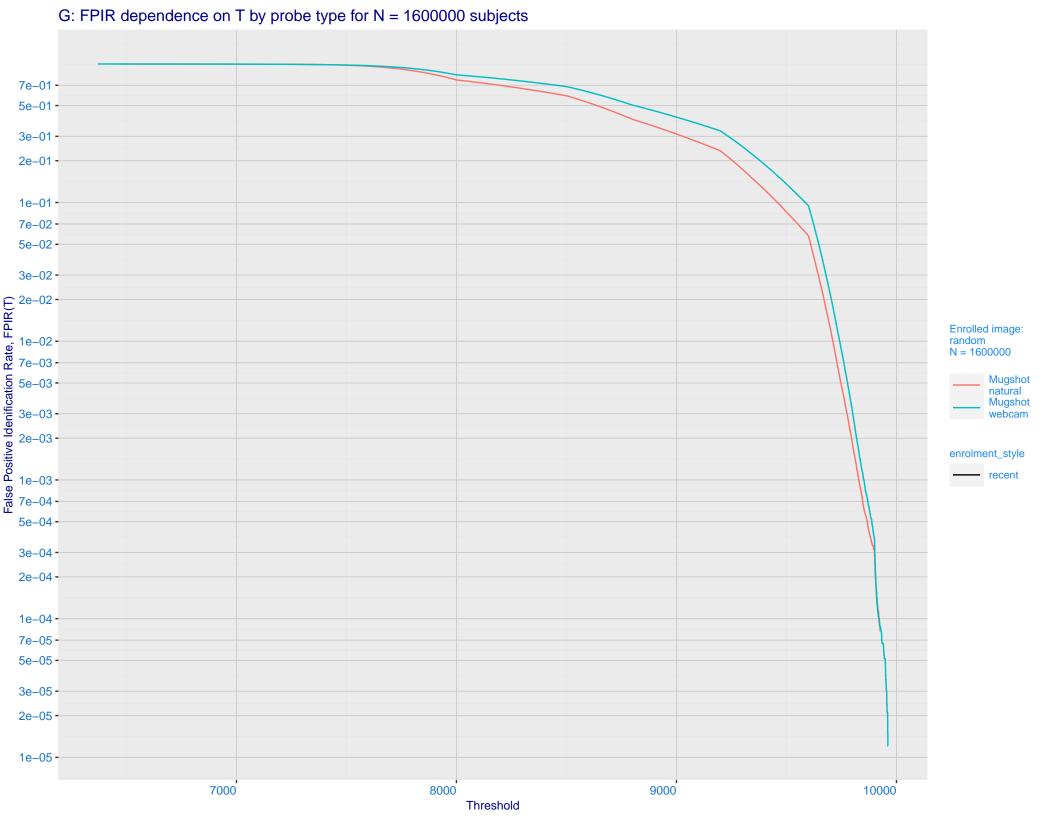
False positive identification rate, FPIR(T)

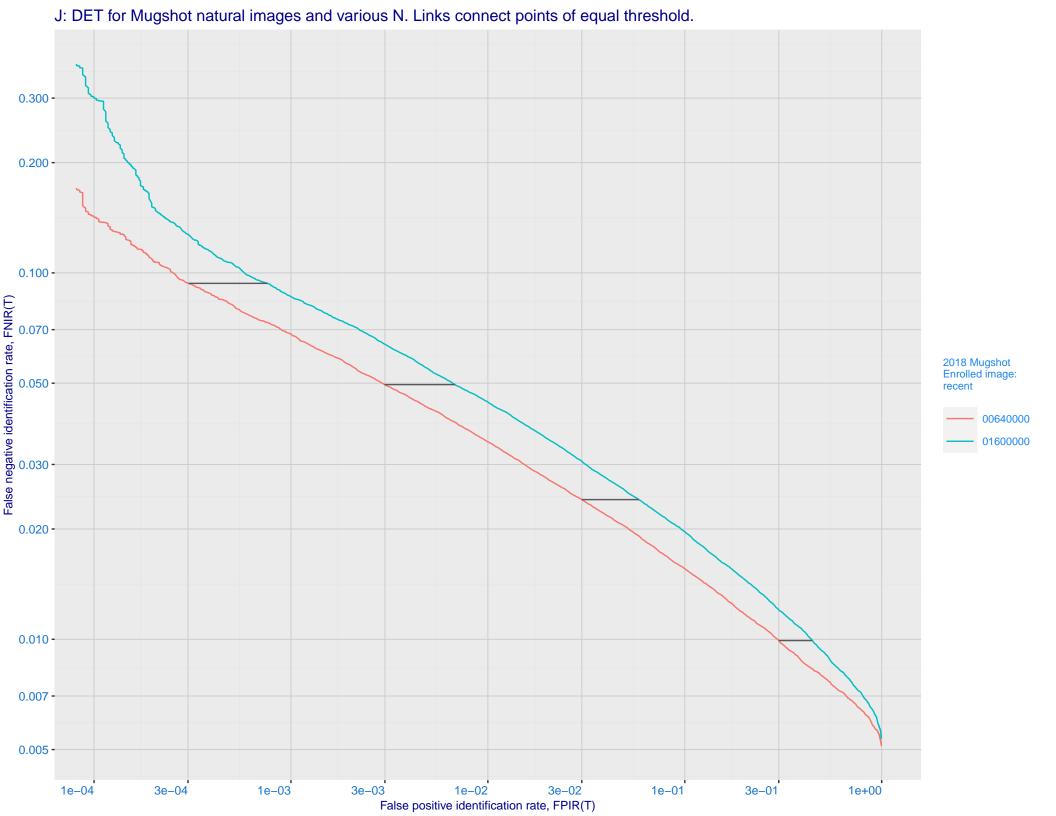
E: Dependence of error rates on T by number enrolled identities, N, for Mugshot natural images

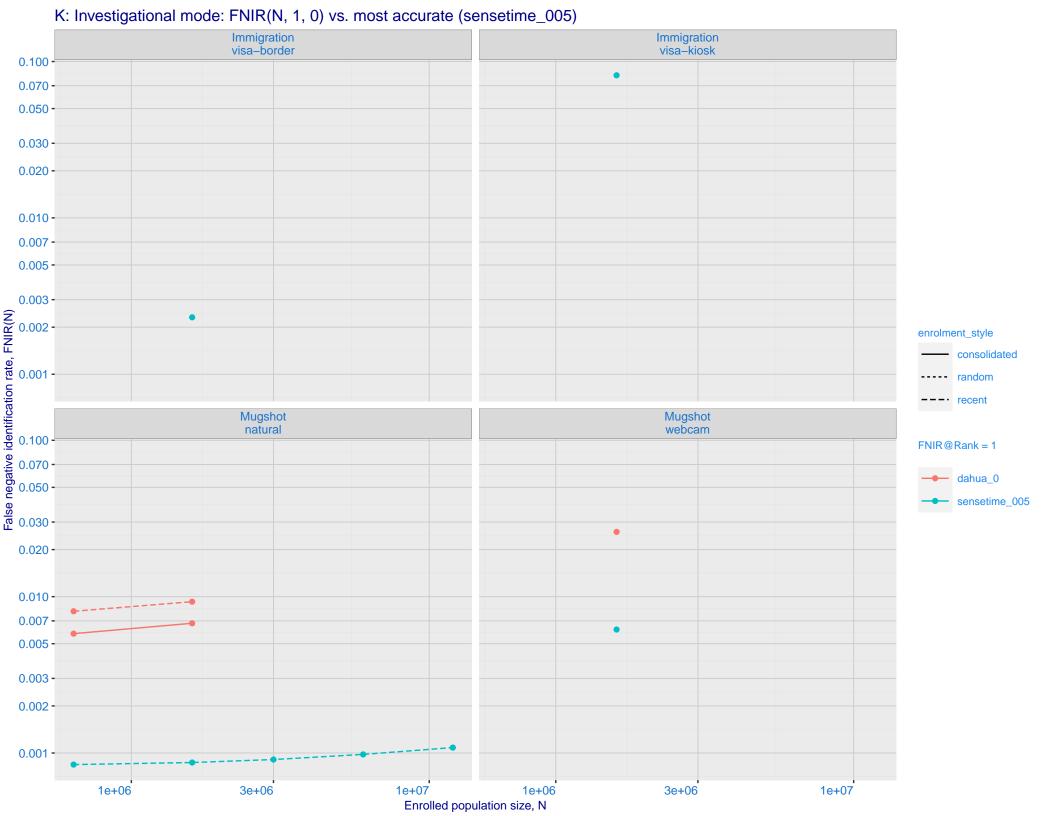


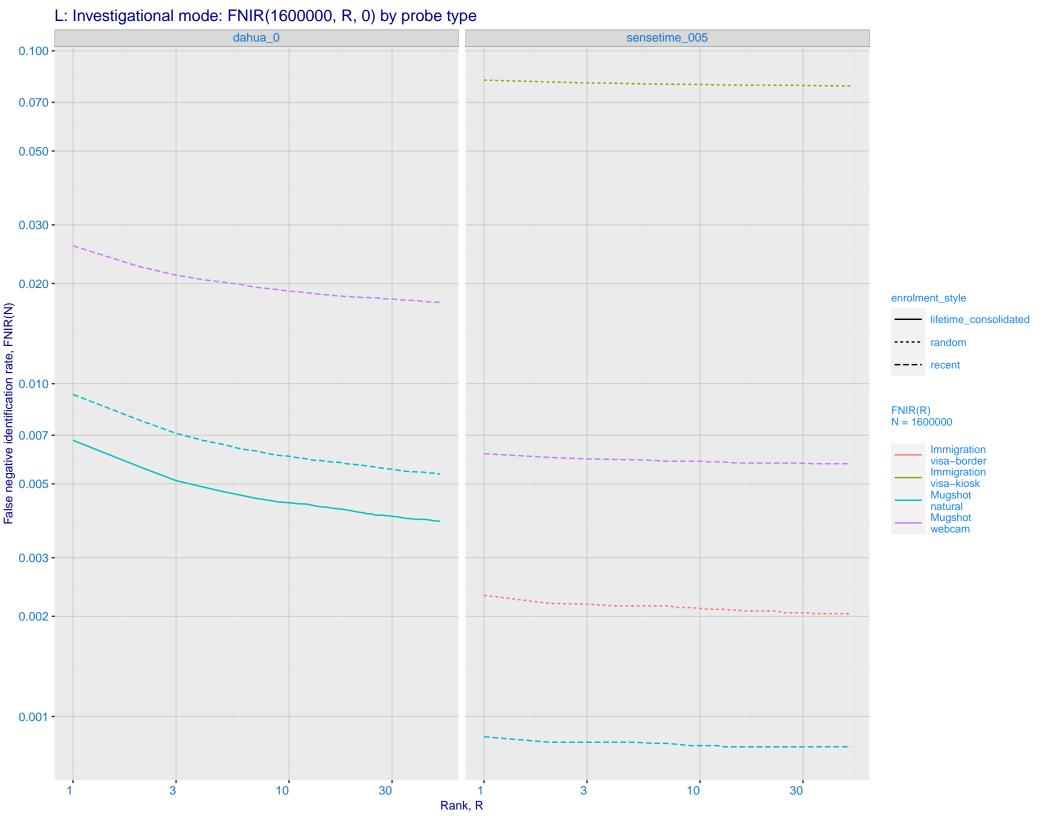


F: FPIR vs. Selectivity for mugshot images, N = 1600000 subjects enrolled with one recent mate 7e+01 -5e+01 -3e+01 -2e+01 -1e+01 -7e+00 -5e+00 -3e+00 -2e+00 -1e+00 -7e-01 -5e-01 -3e-01 -2e-01 -1e-01 - 7e-02 - 3e-02 - 3e-02 - 2e-02 - 1e-02 **Enrolled images:** recent N = 1600000 Mugshot natural Mugshot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

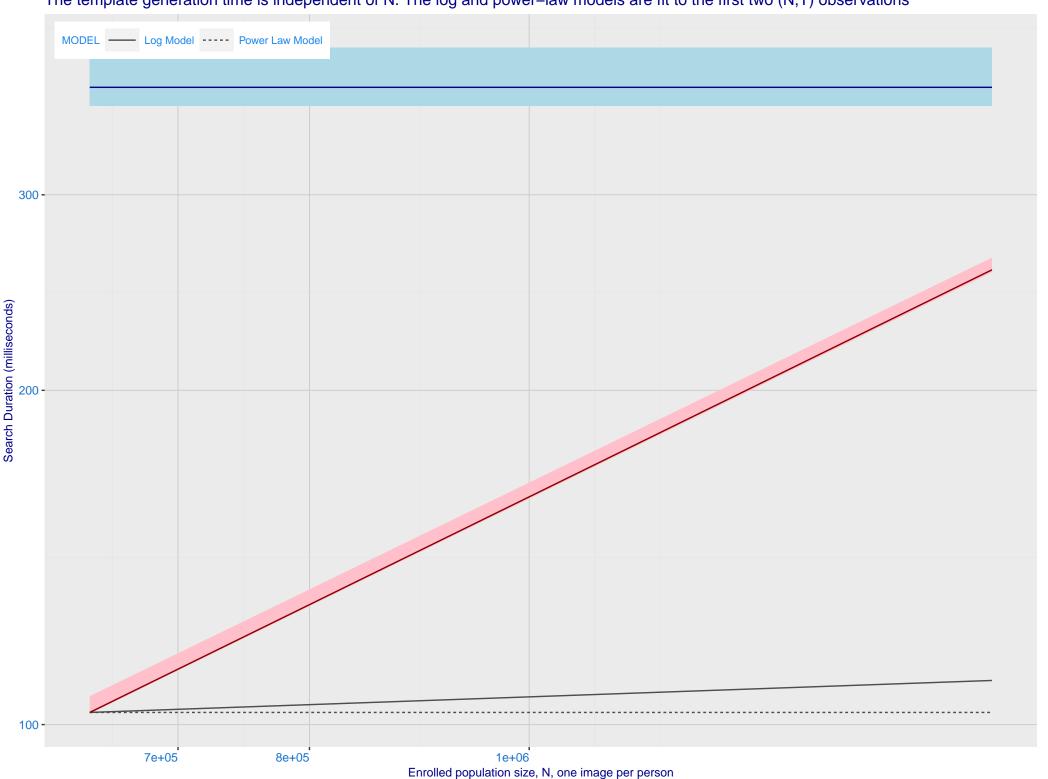








M: Template duration; search duration vs. N. The blue and pink ribbon covers 95 percent of observed measurements. The template generation time is independent of N. The log and power–law models are fit to the first two (N,T) observations



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



