A: Datasheet

Algorithm: allgovision_000

Developer: AllGoVision

Submission Date: 2019_07_30

Template size: 2048 bytes

Template time (2.5 percentile): 381 msec

Template time (median): 405 msec

Template time (97.5 percentile): 631 msec

Investigation:

Frontal mugshot ranking 198 (out of 329) -- FNIR(1600000, 0, 1) = 0.0114 vs. lowest 0.0009 from sensetime_006

Mugshot webcam ranking 174 (out of 291) -- FNIR(1600000, 0, 1) = 0.0332 vs. lowest 0.0057 from sensetime_006

Mugshot profile ranking 174 (out of 260) — FNIR(1600000, 0, 1) = 0.8938 vs. lowest 0.0550 from sensetime_006

Immigration visa-border ranking 137 (out of 218) -- FNIR(1600000, 0, 1) = 0.0208 vs. lowest 0.0009 from sensetime_006

Immigration visa-kiosk ranking 163 (out of 215) -- FNIR(1600000, 0, 1) = 0.2817 vs. lowest 0.0487 from cubox_000

Identification:

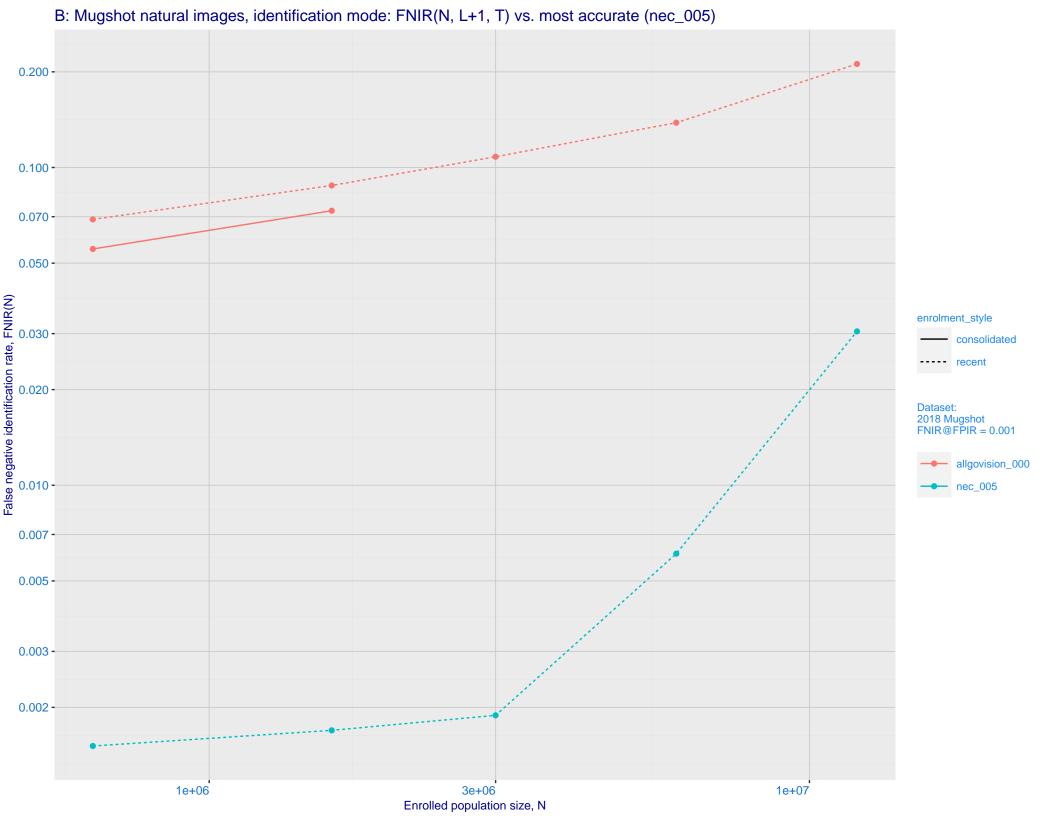
Frontal mugshot ranking 183 (out of 329) -- FNIR(1600000, T, L+1) = 0.0878, FPIR=0.001000 vs. lowest 0.0017 from nec_005

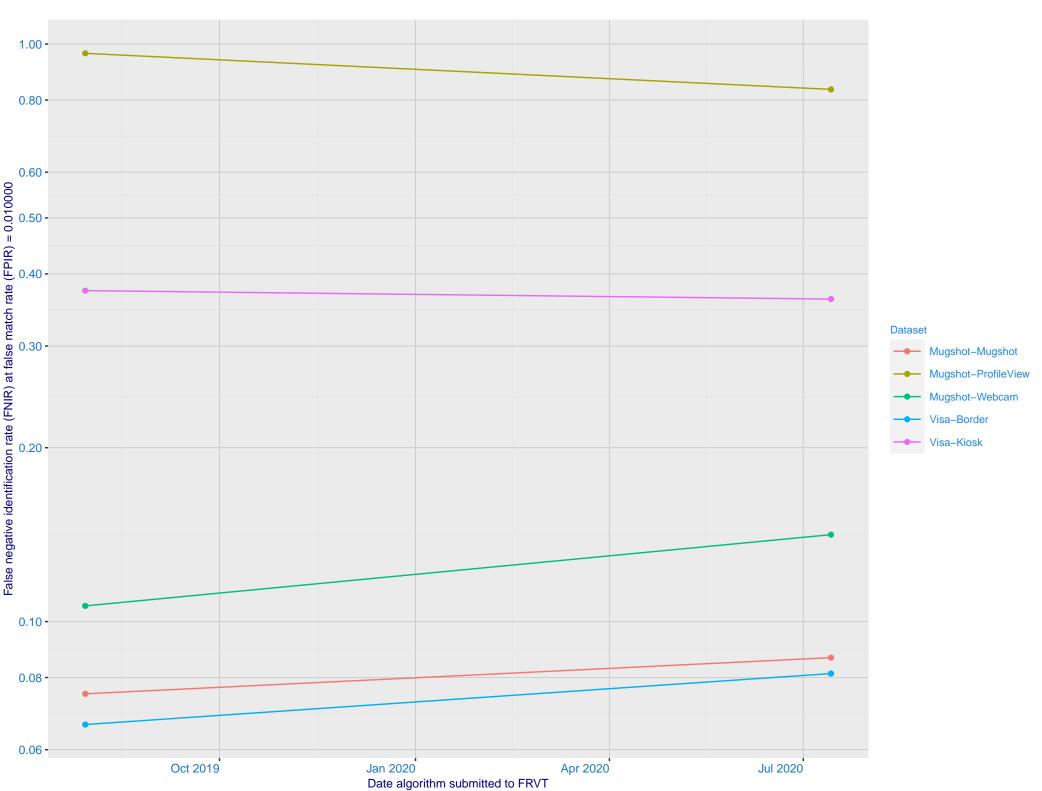
Mugshot webcam ranking 174 (out of 289) -- FNIR(1600000, T, L+1) = 0.1659, FPIR=0.001000 vs. lowest 0.0120 from nec_005

Mugshot profile ranking 112 (out of 259) -- FNIR(1600000, T, L+1) = 0.9903, FPIR=0.001000 vs. lowest 0.1331 from cloudwalk_hr_000

Immigration visa-border ranking 128 (out of 217) -- FNIR(1600000, T, L+1) = 0.1178, FPIR=0.001000 vs. lowest 0.0032 from paravision_009

Immigration visa-kiosk ranking 115 (out of 212) -- FNIR(1600000, T, L+1) = 0.5268, FPIR=0.001000 vs. lowest 0.0728 from paravision_009

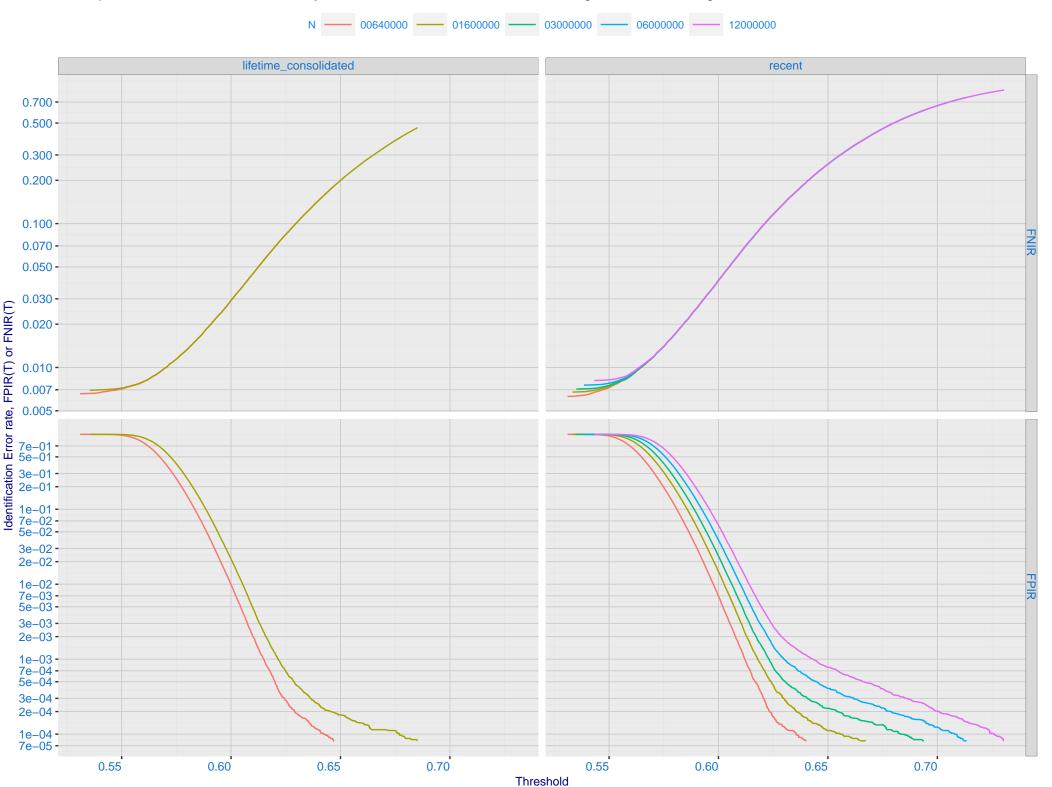




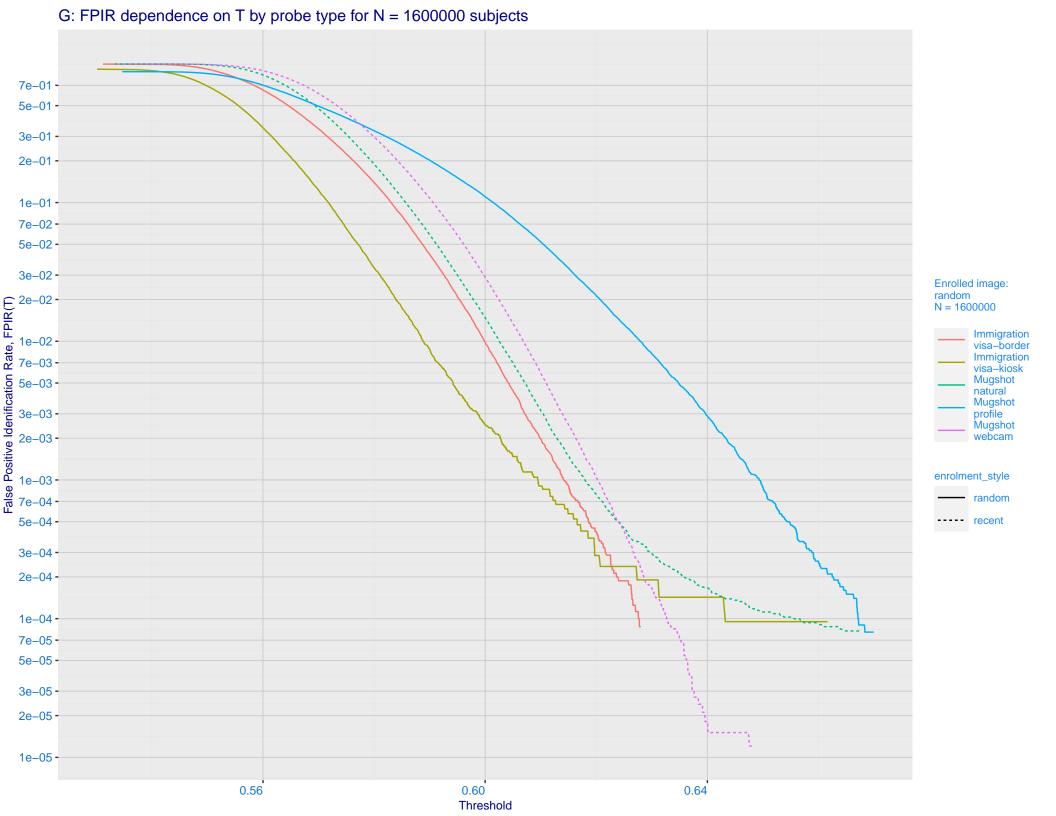
D: 1:N error tradeoff by dataset and enrollment type. N = 1600000 individuals **Immigration Immigration** Mugshot visa-border visa-kiosk natural 0.700 -0.500 -0.300 -0.200 -0.100 -0.070 allgovision 000 0.050 -0.030 -0.020 -0.010 -Construction (2007) - 0.007 - 0.003 - 0.002 - 0.001 - 0.500 - 0.500 - 0.200 enrolment_style consolidated-ONE-MATE random-ONE-MATE recent-ONE-MATE unconsolidated-ALL-MATES unconsolidated-ANY-MATE 0.100 -0.070 -0.050 -0.030 -0.020 -0.010 -0.007 -0.005 -0.003 -0.002 -0.001 -

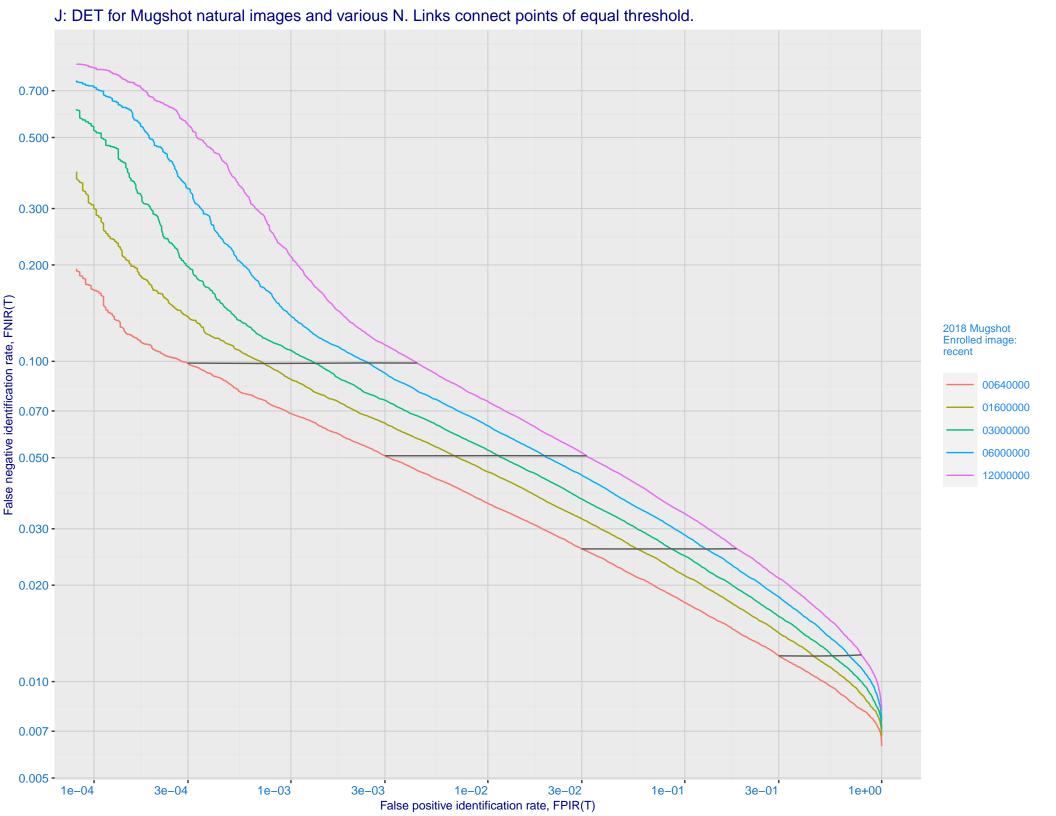
-03e-03e-03e-02e-01e-01e+001e-03e-01e-03e-03e-03e-02e-02e-01e+00

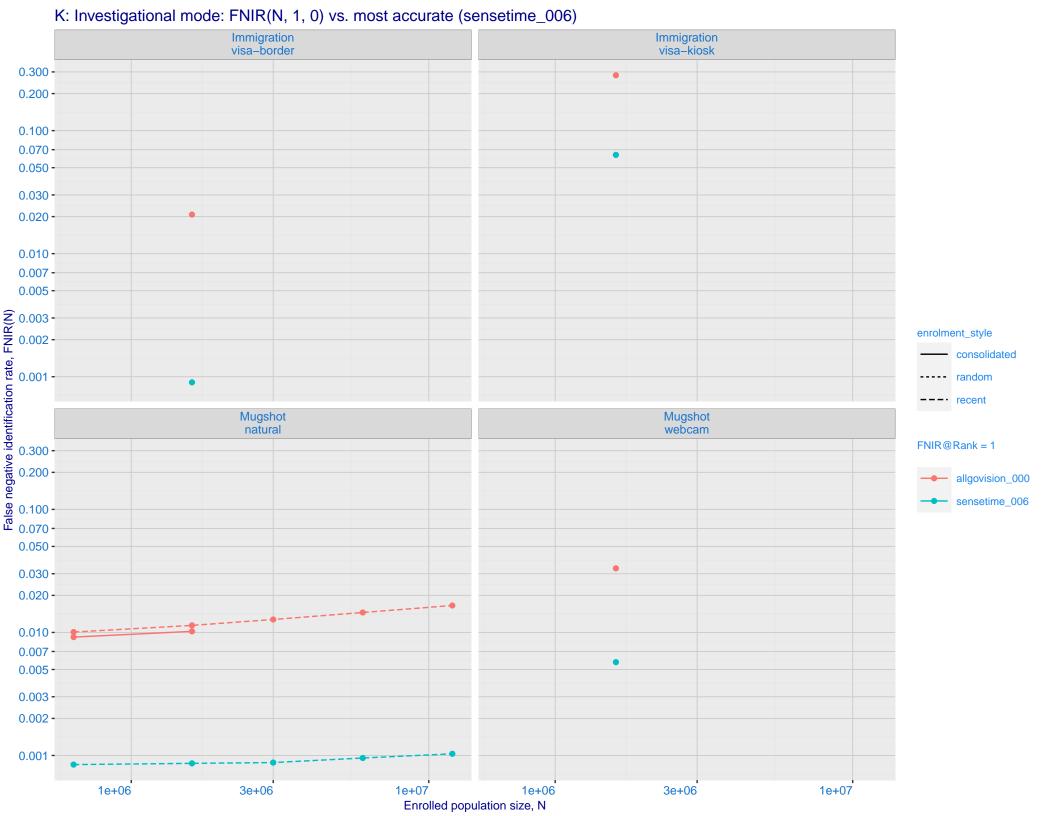
E: Dependence of error rates on T by number enrolled identities, N, for Mugshot natural images

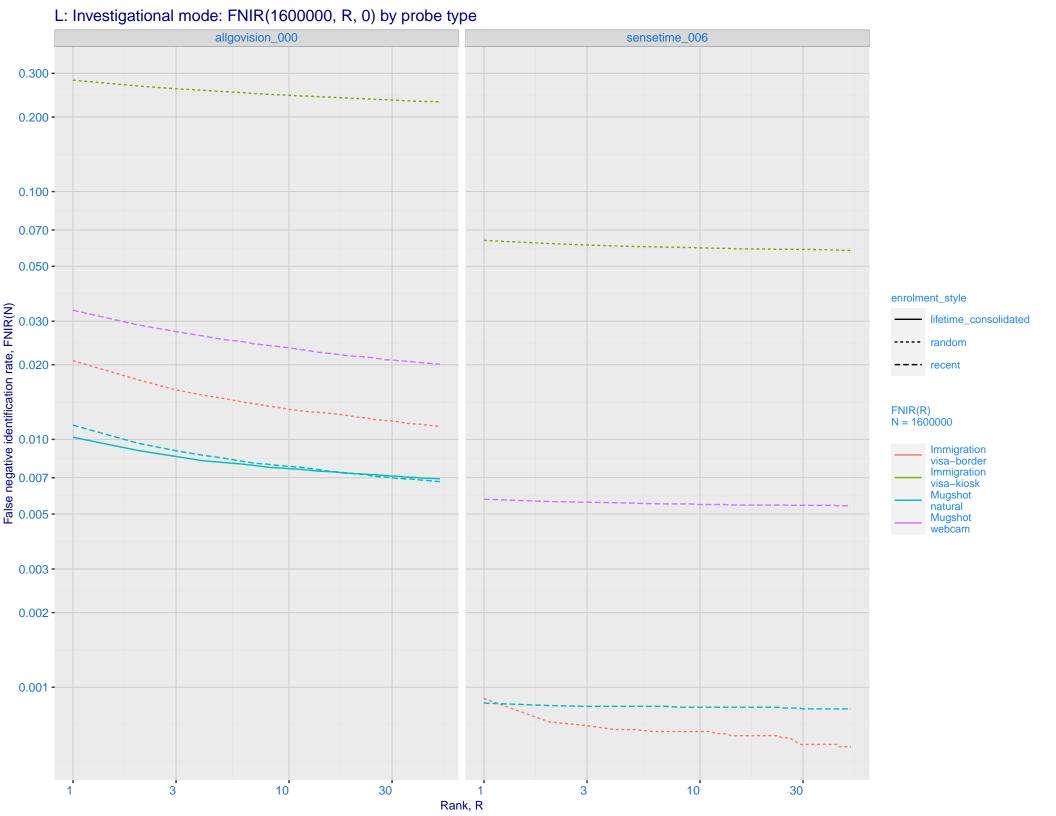


F: FPIR vs. Selectivity for mugshot images, N = 1600000 subjects enrolled with one recent mate 7e+01 -5e+01 -3e+01 -2e+01 -1e+01 -7e+00 -5e+00 -3e+00 -2e+00 -1e+00 -7e-01 -5e-01 -3e-01 -2e-01 -1e-01 -7e-02 -5e-02 -5e-02 -3e-02 -1e-02 -**Enrolled images:** recent N = 1600000 Mugshot natural Mugshot webcam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

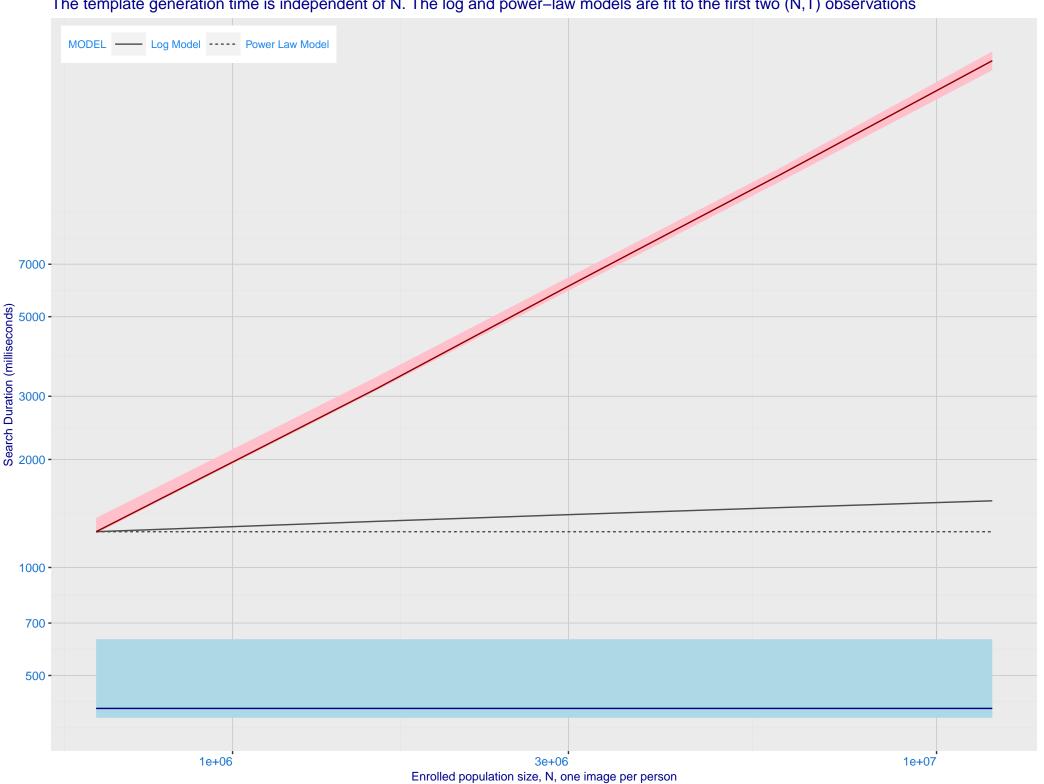








M: Template duration; search duration vs. N. The blue and pink ribbon covers 95 percent of observed measurements. The template generation time is independent of N. The log and power–law models are fit to the first two (N,T) observations



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



