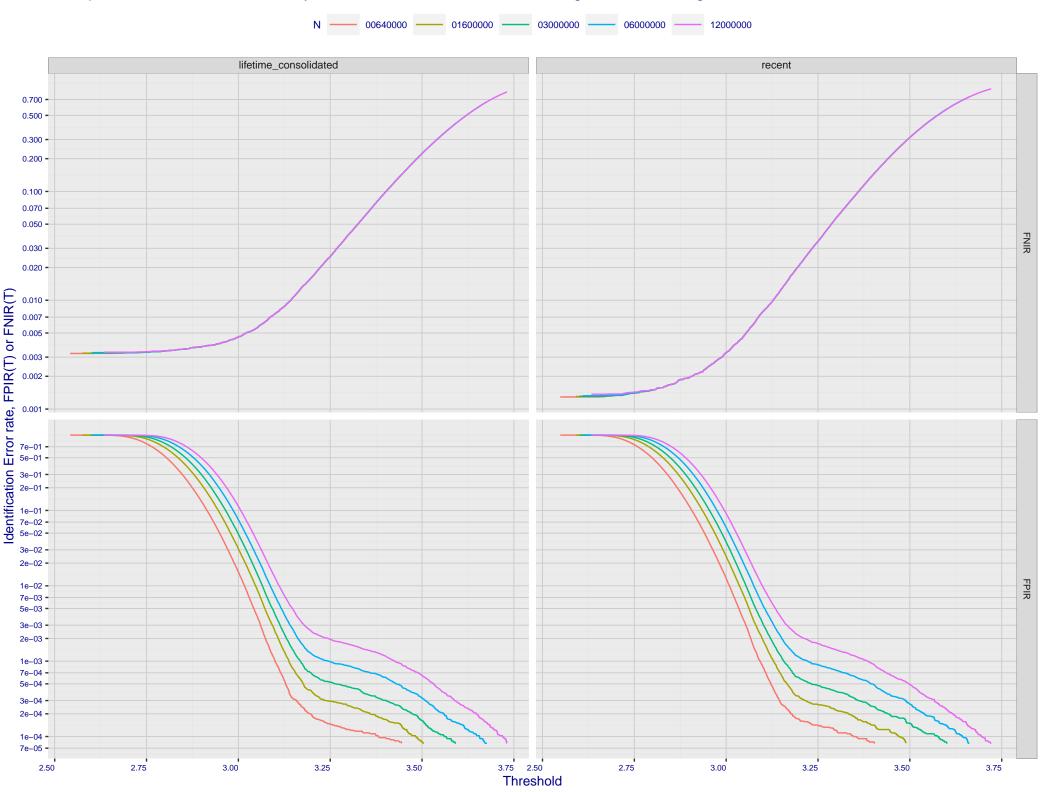
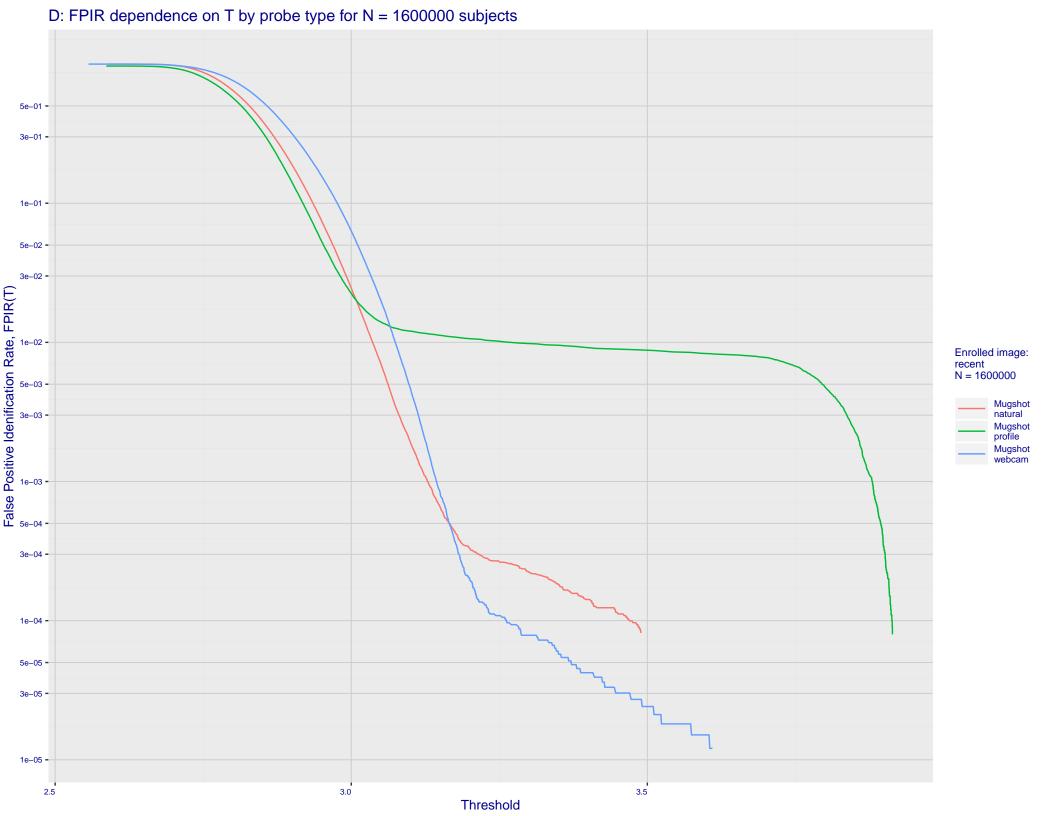
A: 1:N error tradeoff by dataset and enrollment type. N = 1600000 individuals Immigration Immigration Mugshot visa-border visa-kiosk natural 0.700 0.500 0.300 -0.200 -False negative identification rate, FNIR(T) enrolment_style consolidated-ONE-MATE random-ONE-MATE recent-ONE-MATE unconsolidated-ALL-MATES unconsolidated-ANY-MATE 0.007 -0.005 0.003 -0.002 -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

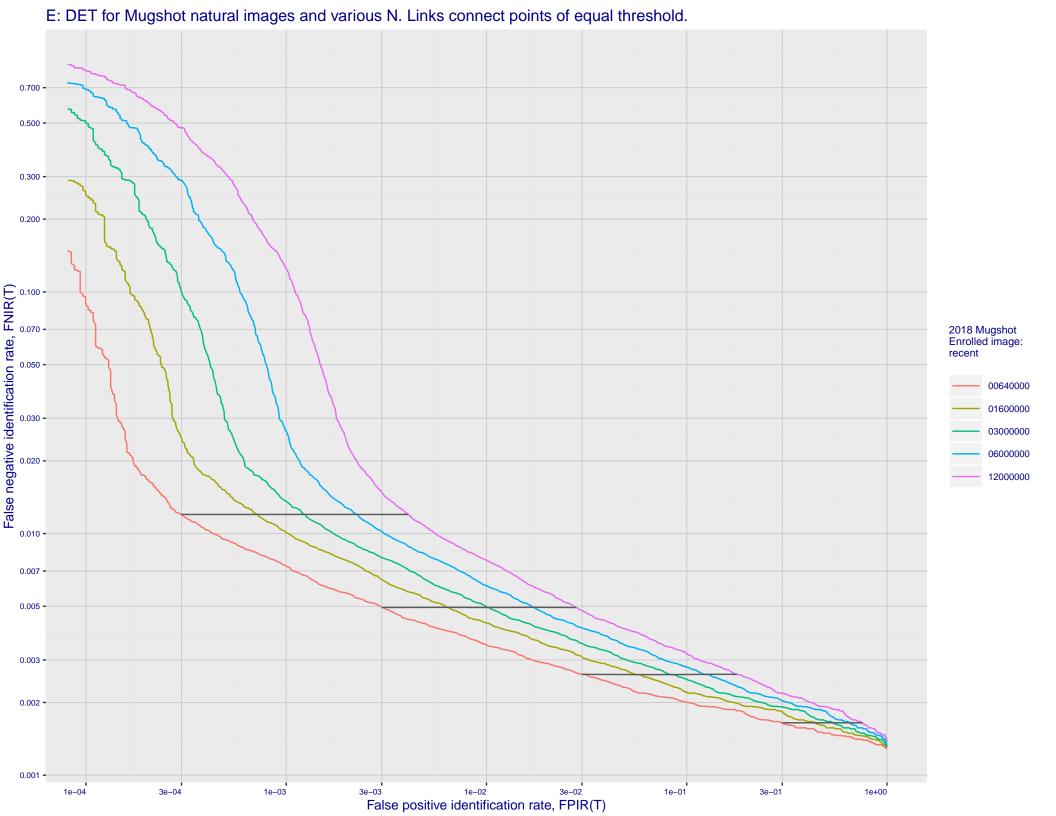
False positive identification rate, FPIR(T)

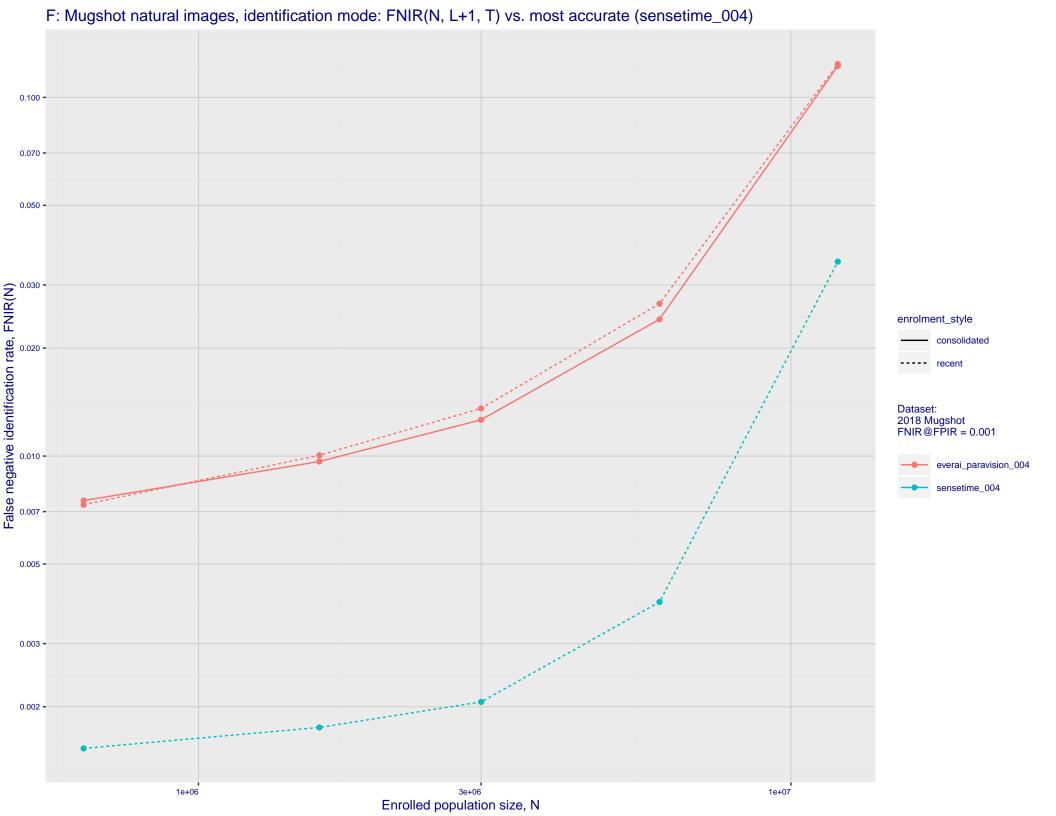
B: Dependence of error rates on T by number enrolled identities, N, for Mugshot natural images



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 -1e-01 -Enrolled images: recent N = 1600000 7e-02 -5e-02 -S 3e-02 - 1e-02 -Mugshot natural Mugshot profile 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 -3e-03 1e-05 3e-05 1e-04 3e-04 1e-01 3e-01 False Positive Idenification Rate, FPIR(T)



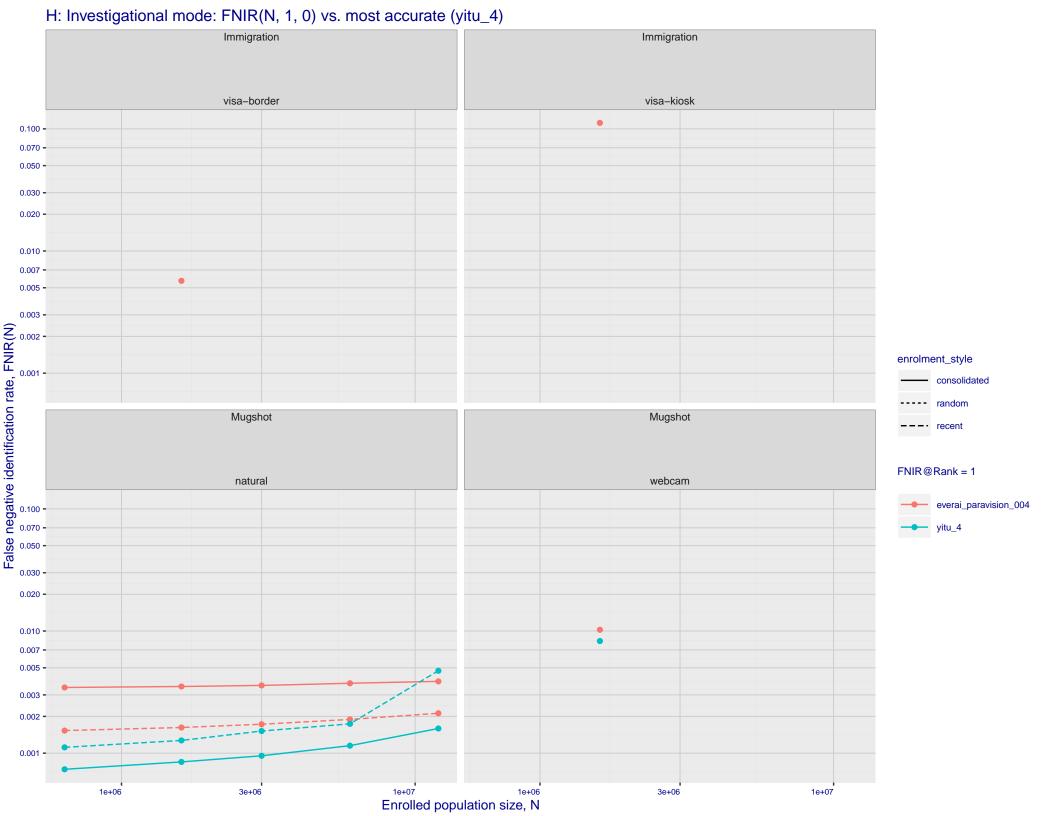


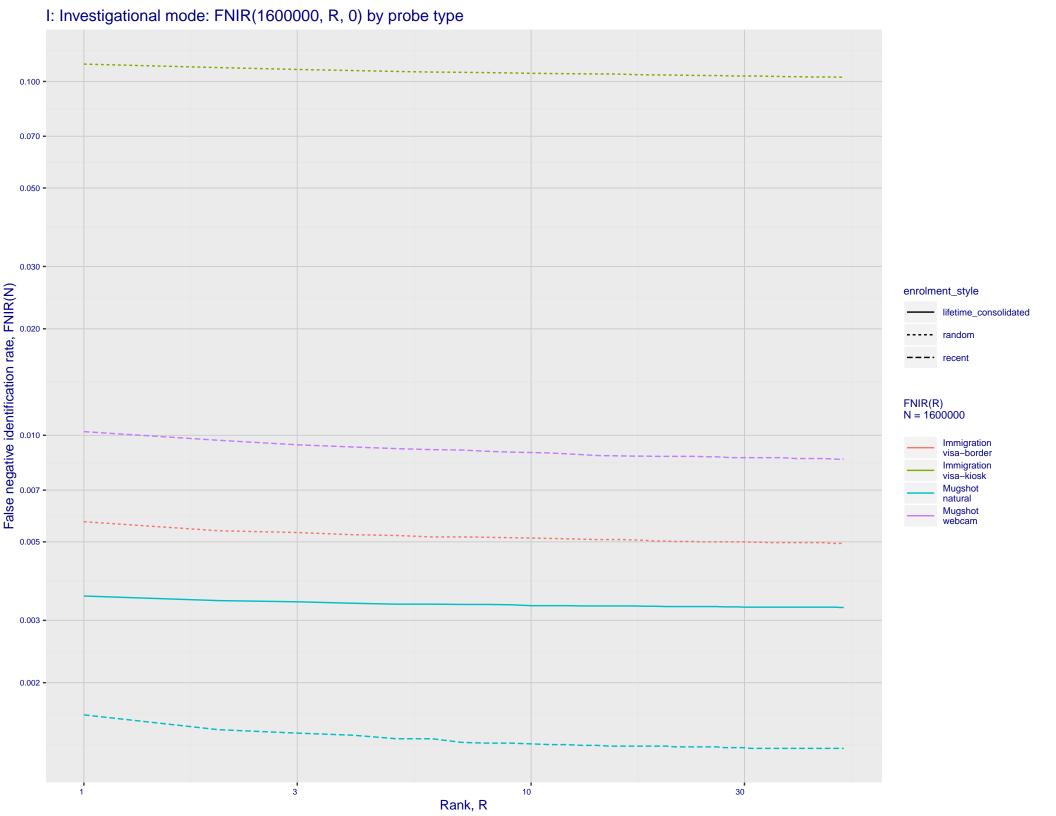


G: Datasheet

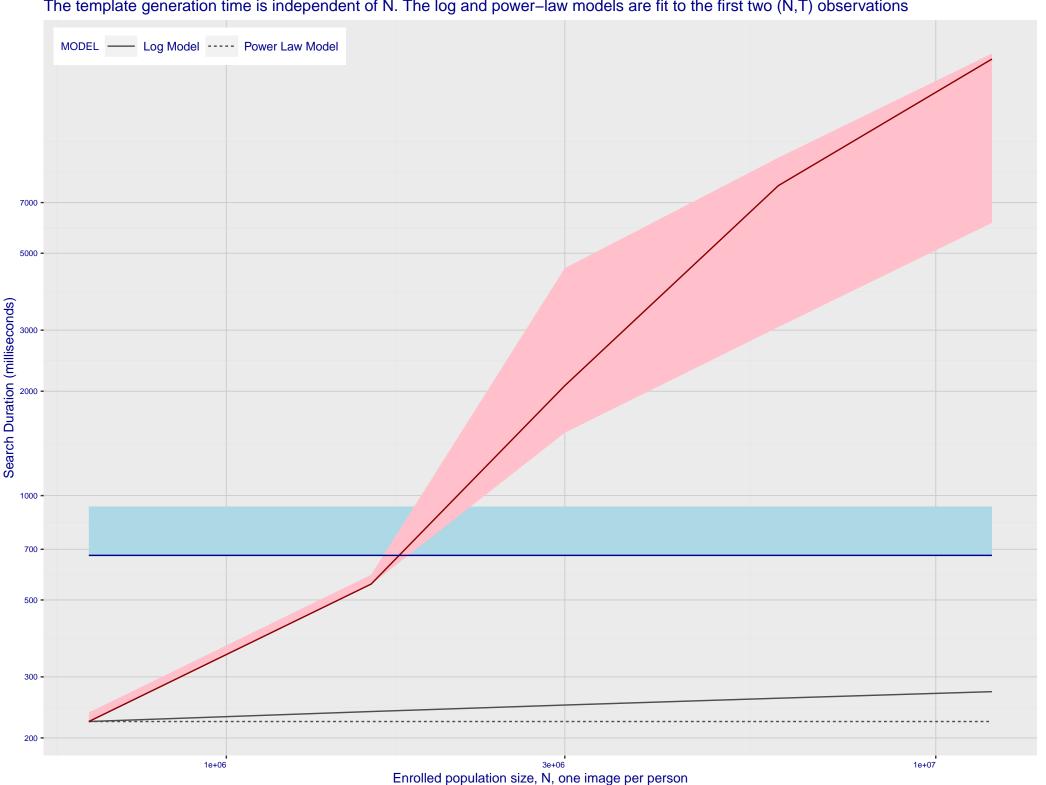
Algorithm: everai_paravision_004

```
Developer: Paravision (EverAI)
Submission Date: 2019_06_19
Template size: 4096 bytes
Template time (2.5 percentile): 670 msec
Template time (median): 672 msec
Template time (97.5 percentile): 930 msec
Frontal mugshot investigation rank 13 — FNIR(1600000, 0, 1) = 0.0016 vs. lowest 0.0010 from sensetime_004
natural investigation rank 14 -- FNIR(1600000, 0, 1) = 0.0102 vs. lowest 0.0067 from sensetime_003
natural investigation rank 4 — FNIR(1600000, 0, 1) = 0.0553 vs. lowest 0.0492 from paravision_005
natural investigation rank 4 — FNIR(1600000, 0, 1) = 0.0553 vs. lowest 0.0492 from paravision_005
natural investigation rank 31 -- FNIR(1600000, 0, 1) = 0.0057 vs. lowest 0.0014 from visionlabs_009
natural investigation rank 30 -- FNIR(1600000, 0, 1) = 0.1120 vs. lowest 0.0694 from cib_000
Frontal mugshot identification rank 9 -- FNIR(1600000, T, L+1) = 0.0100 vs. lowest 0.0018 from sensetime_004
natural identification rank 12 -- FNIR(1600000, T, L+1) = 0.0374 vs. lowest 0.0122 from sensetime_003
natural identification rank 161 -- FNIR(1600000, T, L+1) = 0.9999 vs. lowest 0.1020 from sensetime_004
natural identification rank 12 -- FNIR(1600000, T, L+1) = 0.0181 vs. lowest 0.0059 from sensetime_004
natural identification rank 74 -- FNIR(1600000, T, L+1) = 0.9088 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



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

