Sensing Matrix Design

Jirong Yi *

September 13, 2020

$1 \quad 20200910$

We incorporate the following updates

- flexible GUI size
- extension to accept multiple groups with each of them containing a specific number of pools for the same mixing matrix
- remove the row index or replace it by other row names in 'Decoding Results' and 'Entering Pooling Status' GUIs
- when entering pooling results, allow users to enter in a long table
- remove 'ct value' column
- keep all the three GUIs without closing them
- \bullet 0/1/-3 and the correspondence for both pooling results and decoding results under GUI titles
- put 'Choose Mixing Matrix', 'Entering Pooling Status', 'Decoding Results' GUIs in one window
- keep mixing matrix and pooling results

2 20200913

We incorporate the following updates

- simultaneously decoding for each group of data in epr
- simultaneously updating for decoding results in srd
- remove -3 before decoding
- view big matrix
- in mmd, for each pool, list the samples which participate in the pool
- color indication of 1 in mixing matrix
- color indication of 1,0,-3
- indication of group order
- remove epr data or revise epr data
- new table window for sample participation

^{*}Department of Electrical and Computer Engineering, University of Iowa, Iowa City, IA 52242. Corresponding email: jirong-yi@uiowa.edu.