Algorithm: orthogonal MMC-RFE
Input: gene expression matrix $X$
Output: $r$ top-ranked genes
0. Set $q \leftarrow p$;
Repeat the following steps until $q = r$
1. Form $\tilde{X}$ and compute $\tilde{X} = \frac{1}{\sqrt{n}}(X - me^T)$;
2. Perform the SVD of $\tilde{X}$ as $\tilde{X} = U\Lambda V^T$;
3. Project $X$ onto $(n - 1)$-dimensional space as $Z = U^TX$;
4. Compute $S_b$ and $S_w$ of $Z$;
5. Compute the $(c - 1)$ largest eigenvectors $W$ of $S_b - S_w$;
6. If $q > n - 1$, compute $\tilde{W} = UW$, otherwise set $\tilde{W} \leftarrow W$;
7. Remove gene $j$ with the smallest weight of $\sum_{k=1}^{c-1} |\tilde{w}_{jk}|$, and set $q \leftarrow q - 1$;
   if $q > n - 1$, go to step 1, otherwise form $X$, set $Z \leftarrow X$ and go to step 4.