Evostar 2025 Supplementary material

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1 Introduction

This supplementary material offers further insights and data that reinforce the main manuscript's findings. Organized for clarity, it aids in understanding the experimental results. We recommend that readers consult this material to grasp the depth and reliability of our conclusions. Included are:

1. Cluster heatmaps of constructed features

(a) S_{CC}

(b) S_{MLO}
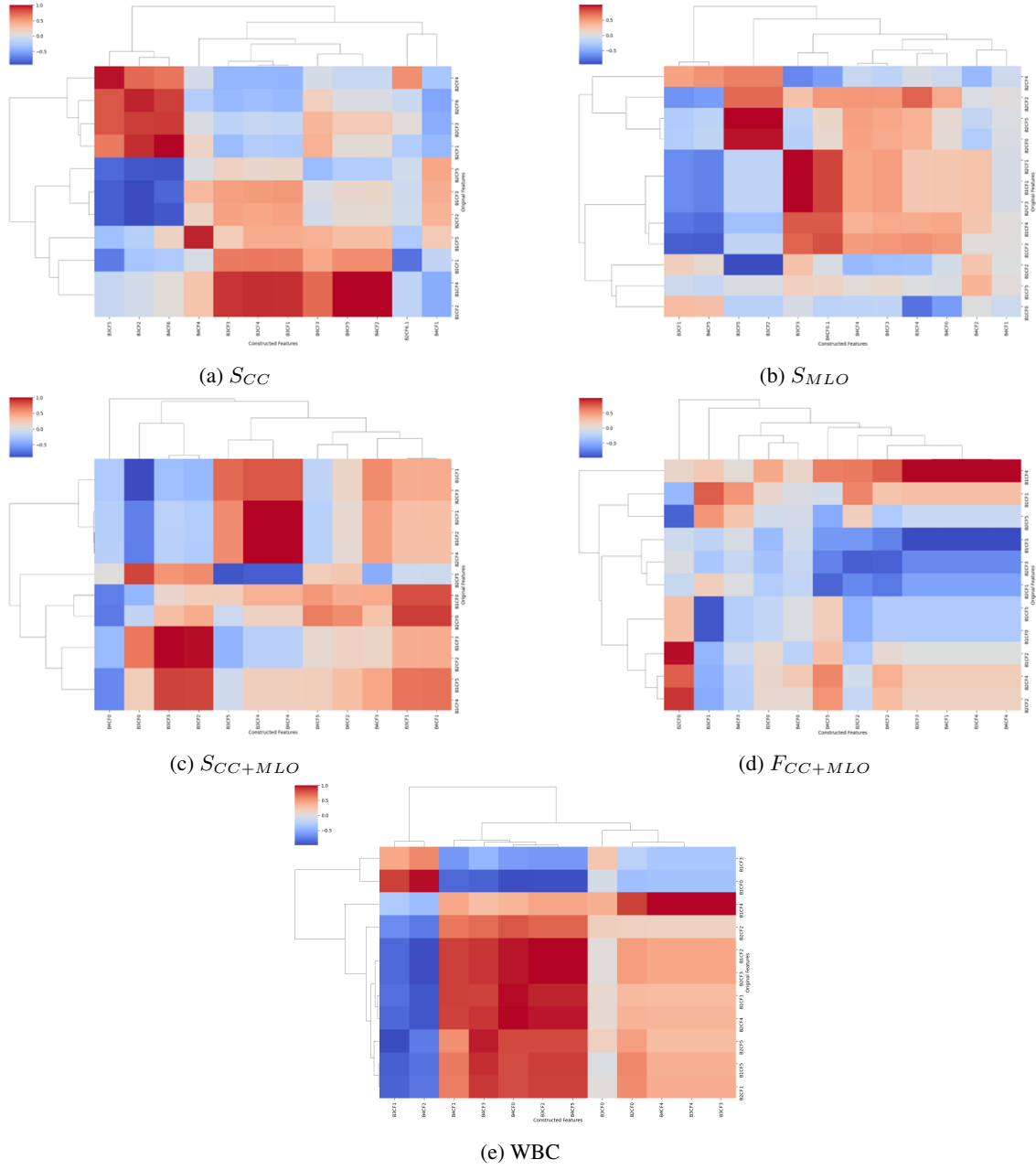
(c) S_{CC+MLO}

(d) F_{CC+MLO}

(e) WBC

Figure 1: The cluster heatmaps for each setup illustrate the correlations between the constructed features (CF). The four closet average individuals were selected based on the mean test AUC from all the 30 runs. The results after applying STEM augmentation are selected. The correlation values range from 1 (highest) to -1 (lowest), indicating the strength of the relationship. Here, B is used for individuals from 1 to 4.

$\langle expression \rangle ::= \langle operator \rangle (\langle expression \rangle , \langle expression \rangle) \mid \langle operand \rangle)$

$\langle operator \rangle ::= \texttt{add} \mid \texttt{sub} \mid \texttt{mul} \mid \texttt{pdiv}$

$\langle operand \rangle ::= \langle x \rangle \mid \langle digit \rangle \langle digit \rangle . \langle digit \rangle \langle digit \rangle$

$\langle x \rangle ::= \texttt{x[0]} \ldots \texttt{x[51]}$

$\langle digit \rangle ::= \texttt{0} \mid \texttt{1} \mid \texttt{2} \mid \texttt{3} \mid \texttt{4} \mid \texttt{5} \mid \texttt{6} \mid \texttt{7} \mid \texttt{8} \mid \texttt{9}$

Figure 2: Grammar used for GE experiments