$\mathcal{E}_{r_1',r_2',r_3'}$

$$\{r_1, r_2, r_3\} \cap \left\{r_1', r_2', r_3'\right\} \neq \emptyset$$

$$\Rightarrow d\left(r\right) \leq 3 \cdot \binom{r-1}{2}$$