



EVOLUTIONARY ALGORITHMS

# HOMEWORK

## Fourth task

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<http://www.github.com/csp98>

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1. Three individuals are coded  $e_1 = 00010$ ,  $e_2 = 01001$  and  $e_3 = 11001$ . How many schemes fits either  $e_1$  or  $e_2$ ? How many schemes fit all three?
2. Two individuals are coded  $e_1 = 0101$  and  $e_2 = 0100$ . How many different offsprings can they have if we use one-point crossover? And if we use uniform crossover?
3. Find that largest codebook you can for the one error correcting codebook problem (using 8-long bit sequences as words).

## Bibliography

- [1] Course Webpage  
<http://math.bme.hu/~safaro/evolalgen.html>
- [2] <https://tex.stackexchange.com/>