

Assignment 3

1. Consider the generalized modus ponens in your last homework. Create a Mamdani inference system reflecting it (by using the Scilab FLToolkit) (6 points). Show a numerical result and comment on it (2 points).
2. By using GAs, tackle the minimization problem of the function below, with $n=2$ (5 points).

Name function	Mathematical definition	Range	f_{\min}
Griewank	$f_{11}(x) = \frac{1}{4000} \sum_{i=1}^n x_i^2 - \prod_{i=1}^n \cos\left(\frac{x_i}{\sqrt{i}}\right) + 1$	$[-600, 600]$	0