Effective Programming Practices for Economists

Numerical Optimization

Set up of the example

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Function

In these lectures we will use the following function as a target for our optimization:

$$f(\mathbf{x}) = \sum_{j=1}^{J} w_j \cdot x^{j-1}$$

with $J = 12$.

Weights used

```
WEIGHTS = [
    9.003014962148157,
    -3.383000146393776,
    -0.6037887934635748,
    1.6984454347036886,
    -0.9447426232680957,
    0.2669069434366247,
    -0.04446368897497234,
    0.00460781796708519,
    -0.0003000790127508276,
    1.1934114174145725e-05,
    -2.6471293419570505e-07,
    2.5090819960943964e-09,
]
```