

Effective Programming Practices for Economists

Scientific Computing

Profiling code with snakeviz

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Remarks

- Snakeviz is most useful if your code is structured in many small functions
- Don't obsess about the lowest levels of the output. It is enough if you find out which of your functions is currently a bottleneck.

Non obvious outputs

- A lot of time is spent in `__getitem__` and `__setitem__` calls
 - You are using the wrong data structures
 - Replace DataFrames or dicts with numpy arrays where possible
- All time is spent in numpy operations but your code is still much slower than one would expect
 - You are doing array operations in a loop
 - Either use full loops with numba or full vectorization. Never a middle ground