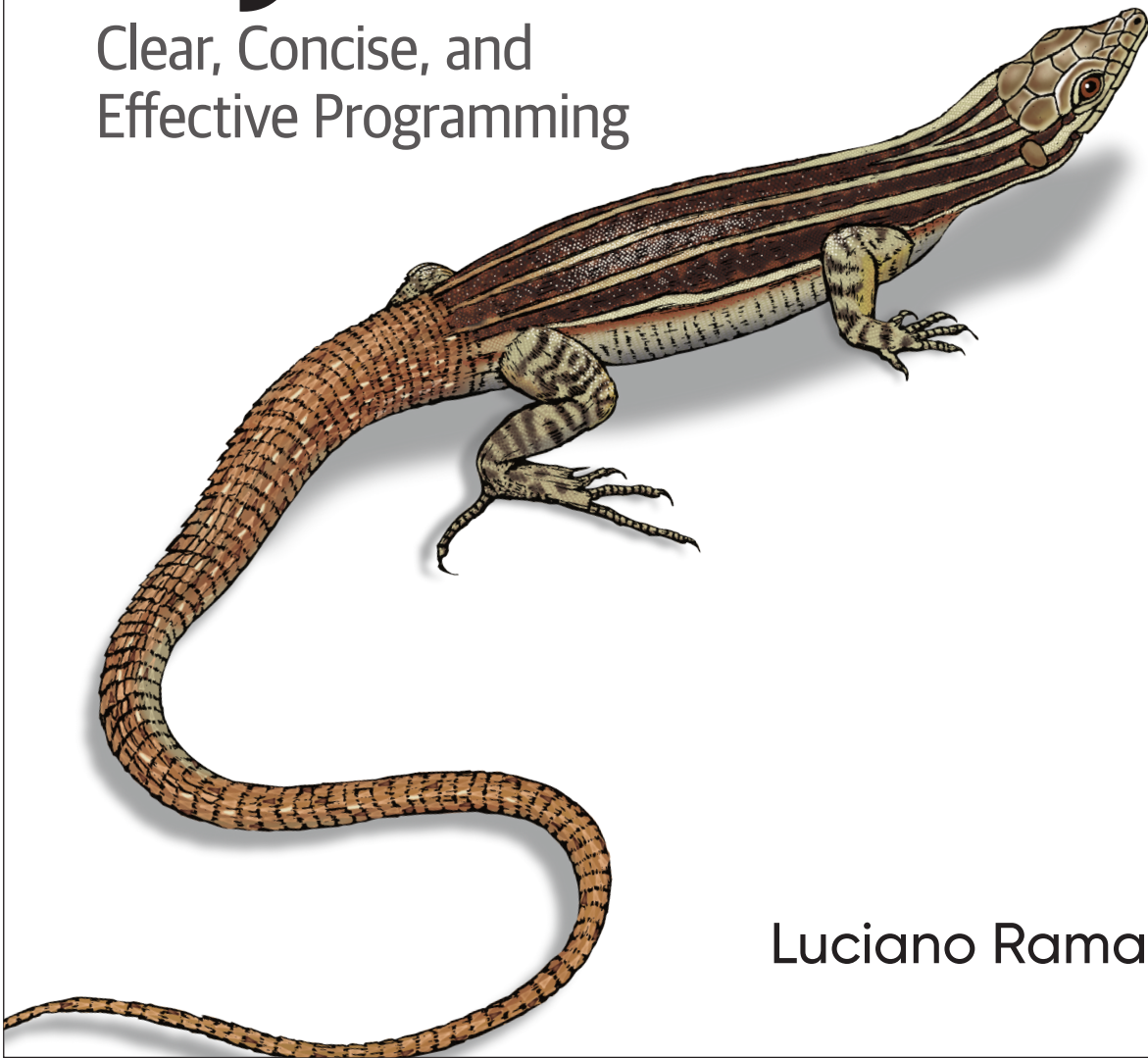


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Fluent Python

Clear, Concise, and
Effective Programming



Luciano Ramalho



Fluent Python

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- **Data structures:** Sequences, dicts, sets, Unicode, and data classes
- **Functions as objects:** First-class functions, related design patterns, and type hints in function declarations
- **Object-oriented idioms:** Composition, inheritance, mixins, interfaces, operator overloading, protocols, and more static types
- **Control flow:** Context managers, generators, coroutines, async/await, and thread/process pools
- **Metaprogramming:** Properties, attribute descriptors, class decorators, and new class metaprogramming hooks that replace or simplify metaclasses

Luciano Ramalho is a principal consultant at Thoughtworks and a Python Software Foundation fellow.

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Effective Programming*

Luciano Ramalho

Beijing • Boston • Farnham • Sebastopol • Tokyo

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Fluent Python

by Lucia M. Ramalho

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[LSI]

Para Marta, com todo o meu amor.

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