

# “Functional Programming in Scala”

## Chapter 3

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# Important Topics

- Immutable data structures
- Data sharing
- Pattern matching & declarative specification of algorithms
- Covariance in type parameters
- Recursion
- Abstraction via parameterization with
  - Higher order functions
  - Type parameters
- Equational reasoning
- Algebraic data types via subclassing
- Differing encapsulation conventions

# Additional Topics

- Companion objects
- Variadic functions
- Advantages of multiple parameter lists for type inference
- Tuples
- Special Scala syntax for lists
- Differing naming conventions