

# Wind: A Flow based Programming Language

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## 0.1 Preface

This book is intended as an overview of the Wind programming language. It discusses the paradigm of flow-based programming, and the principles of it. The book discusses the advantages and disadvantages of flow-based programming, while then proceeding onto the syntax and usage of the Wind language. The book also, in detail, describes the C implementation of the language. The state management, the instructions, the translation of source code, and execution are all covered.

The Wind language is not a fully fledged, general purpose programming language. It is a language with a fundamental set of computation tools and components. Wind was developed with the following goals in mind.

### *Goals*

1. An extremely light-weight language that is highly portable.
2. A programming language which does not use dynamic memory allocation.
3. A fluid, highly dynamically typed runtime.
4. A system that allows efficient transfers of immutable data.

The most unique element of Wind is that it is a "bare bones" language. It has no abstract syntax tree, no tokenizer, parser, or standard library. It reads and executes instructions directly from source code.