Relational Programming in miniKanren

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For my H211 students: Indiana University, Fall 2010 & 2011.

Learning with always trumps learning from.

—Woodie Flowers

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Preface

Audience

This book is written for intermediate-to-advanced programmers, computer science students, and researchers. For this book, *intermediate* means that you are comfortable writing simple recursive procedures in a functional programming language, such as Scheme, Racket, Clojure, Lisp, ML, or Haskell. I also assume you have a reading knowledge of Scheme. No knowledge of relational programming, logic programming, programming language theory, or miniKanren is required.

Most importantly, you should be prepared to have your mind blown by the awesomeness that is relational programming.

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If you want to learn about relational programming, but are new to programming, are you in luck! I co-wrote another book just for you, *The Reasoned Schemer*. You might first read *The Little Schemer*, a very gentle introduction to recursion and functional programming.

If you are an experienced programmer, but weak on recursion, you might benefit from *The Little Schemer*. If you are comfortable with recursion, but not functional programming, good introductions include *Scheme and the Art of Programming* and the classic *Structure and Interpretation of Computer Programs* (full text at `http://mitpress.mit.edu/sicp/full-text/book/book.html`).

If you are an experienced functional programmer, but do not know Scheme, the beginning of *Structure and Interpretation of Computer Programs* should get you up to speed, while *The Scheme Programming Language, 4th Edition* (full text at `http://www.scheme.com/tspl4/`) describes the language in detail.

Introduction

Bibliography