

# Contents

	<b>Foreword</b>	vii
	<b>Acknowledgments</b>	ix
	<b>Introduction</b>	xv
1.	<b>Lua</b>	1
	Day 1: The Call to Adventure	2
	Day 2: Tables All the Way Down	14
	Day 3: Lua and the World	32
	Wrapping Up Lua	47
2.	<b>Factor</b>	49
	Day 1: Stack On, Stack Off	50
	Day 2: Painting the Fence	61
	Day 3: Balancing on a Boat	73
	Wrapping Up Factor	86
3.	<b>Elm</b>	89
	Day 1: Handling the Basics	90
	Day 2: Taming Callbacks	100
	Day 3: It's All a Game	110
	Wrapping Up Elm	123
4.	<b>Elixir</b>	125
	Day 1: Laying a Great Foundation	126
	Day 2: Controlling Mutations	142
	Day 3: Spawning and Respawning	158
	Wrapping Up Elixir	167
5.	<b>Julia</b>	171
	Day 1: Resistance Is Futile	172
	Day 2: Getting Assimilated	183

Day 3: Become One with Julia	195
Wrapping Up Julia	206
<b>6. miniKanren</b> . . . . .	<b>209</b>
Day 1: Unified Theories of Code	210
Day 2: Mixing the Logical and Functional	220
Day 3: Writing Stories with Logic	228
Wrapping Up miniKanren	240
<b>7. Idris</b> . . . . .	<b>243</b>
Day 1: The Basics	244
Day 2: Getting Started With Dependent Types	253
Day 3: Dependent Types in Action	262
Wrapping Up Idris	274
<b>8. Wrapping Up</b> . . . . .	<b>277</b>
The Origins	277
The Central Expressway	279
The Frontier	281
The Dirty Map	282
A Final Challenge	284
<b>Bibliography</b> . . . . .	<b>285</b>
<b>Index</b> . . . . .	<b>287</b>