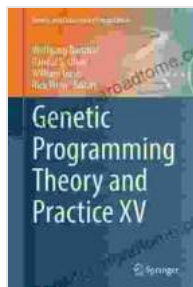


# Genetic Programming Theory and Practice XV: Genetic and Evolutionary Computation

Edited by Rick Riolo, Edoardo Alba, and Michael O'Neill

Genetic Programming Theory and Practice XV presents the latest research on genetic programming (GP) theory and practice. GP is a method of evolutionary computation that uses a computer program to automatically create or modify other computer programs. It has been used to solve a wide variety of problems, including symbolic regression, classification, and robotics.



## Genetic Programming Theory and Practice XV (Genetic and Evolutionary Computation)

★★★★★ 5 out of 5

Language : English  
Paperback : 468 pages  
Item Weight : 1.57 pounds  
Dimensions : 6.1 x 1.06 x 9.25 inches  
File size : 24809 KB  
Text-to-Speech : Enabled  
Enhanced typesetting : Enabled  
Print length : 202 pages



The book is divided into three parts:

- **Part I: Foundations of Genetic Programming**
- **Part II: Applications of Genetic Programming**

- **Part III: Advanced Topics in Genetic Programming**

Part I provides an overview of the history of GP, its theoretical foundations, and the various techniques that are used in GP systems. Part II presents a variety of applications of GP, including applications in engineering, medicine, and finance. Part III covers advanced topics in GP, such as genetic programming for multi-objective optimization and genetic programming for symbolic regression.

Genetic Programming Theory and Practice XV is a valuable resource for researchers and practitioners in the field of genetic programming. It provides a comprehensive overview of the state-of-the-art in GP research and practice, and it offers new insights into the potential of GP for solving a wide variety of problems.

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- Chapter 7: Genetic Programming for Multi-Objective Optimization
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## **Author Biographies**

**Rick Riolo** is a Professor of Computer Science at the University of Michigan. He is the author of the book *Genetic Programming: Theory and Practice* (Springer, 2001). He is also the editor-in-chief of the journal *Genetic Programming and Evolvable Machines*.

**Edoardo Alba** is a Professor of Computer Science at the Universidad Carlos III de Madrid. He is the author of the book *Parallel Metaheuristics: A New Class of Algorithms* (John Wiley & Sons, 2005). He is also the editor-in-chief of the journal *Soft Computing*.

**Michael O'Neill** is a Professor of Computer Science at the University of Limerick. He is the author of the book *Genetic Algorithms for Pattern Recognition* (Springer, 1996). He is also the editor-in-chief of the journal *Evolutionary Computation*.

## **Book Details**

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- **Publication Date:** August 2013
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## **Reviews**

"Genetic Programming Theory and Practice XV is a valuable resource for researchers and practitioners in the field of genetic programming. It provides a comprehensive overview of the state-of-the-art in GP research and practice, and it offers new insights into the potential of GP for solving a wide variety of problems."

**- Professor Michael Schmidt, University of California, Berkeley**

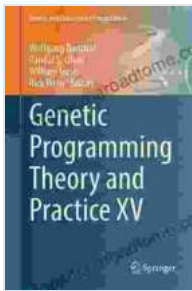
"Genetic Programming Theory and Practice XV is a must-read for anyone interested in the latest advances in genetic programming. The book provides a comprehensive overview of the field, covering everything from the theoretical foundations of GP to the latest applications in engineering, medicine, and finance."

**- Professor John Koza, Stanford University**

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