

CONTENTS

<i>List of Contributors</i>	ix
-----------------------------	----

PART I GROUNDING ALGORITHMIC MUSIC

1. Musical Algorithms as Tools, Languages, and Partners: A Perspective ALEX MCLEAN AND ROGER T. DEAN	3
2. Algorithmic Music and the Philosophy of Time JULIAN ROHRHUBER	17
3. Action and Perception: Embodying Algorithms and the Extended Mind PALLE DAHLSTEDT	41
4. Origins of Algorithmic Thinking in Music NICK COLLINS	67
5. Algorithmic Thinking and Central Javanese Gamelan CHARLES MATTHEWS	79

Perspectives on Practice A

6. Thoughts on Composing with Algorithms LAURIE SPIEGEL	105
7. Mexico and India: Diversifying and Expanding the Live Coding Community ALEXANDRA CÁRDENAS	113
8. Deautomatization of Breakfast Perceptions RENATE WIESER	119
9. Why Do We Want Our Computers to Improvise? GEORGE E. LEWIS	123

PART II WHAT CAN ALGORITHMS IN MUSIC DO?

10. Compositions Created with Constraint Programming TORSTEN ANDERS	133
11. Linking Sonic Aesthetics with Mathematical Theories ANDREW J. MILNE	155
12. The Machine Learning Algorithm as Creative Musical Tool REBECCA FIEBRINK AND BAPTISTE CARAMIAUX	181
13. Biologically Inspired and Agent-Based Algorithms for Music ALICE ELDRIDGE AND OLIVER BOWN	209
14. Performing with Patterns of Time THOR MAGNUSSON AND ALEX MCLEAN	245
15. Computational Creativity and Live Algorithms GERAINT WIGGINS AND JAMIE FORTH	267
16. Tensions and Techniques in Live Coding Performance CHARLES ROBERTS AND GRAHAM WAKEFIELD	293

Perspectives on Practice B

17. When Algorithms Meet Machines SARAH ANGLISS	321
18. Notes on Pattern Synthesis: 1983 to 2013 MARK FELL	325
19. Performing Algorithms KRISTIN GRACE ERICKSON	335

PART III PURPOSES OF ALGORITHMS FOR THE MUSIC MAKER

20. Network Music and the Algorithmic Ensemble DAVID OGBORN	345
21. Sonification ≠ Music CARLA SCALETTI	363

22. Colour Is the Keyboard: Case Studies in Transcoding Visual to Sonic MARGARET SCHEDEL	387
23. Designing Interfaces for Musical Algorithms JAMIE BULLOCK	423
24. Ecooperative Music Game Theory DAVID KANAGA	451
25. Algorithmic Spatialization JAN C. SCHACHER	471

Perspectives on Practice C

26. Form, Chaos, and the Nuance of Beauty MILEECE I'ANSON	499
27. Beyond Me KAFFE MATTHEWS	503
28. Perspective on Practice JAN BERAN	507
29. Thoughts on an Algorithmic Practice WARREN BURT	517

PART IV ALGORITHMIC CULTURE

30. The Audience Reception of Algorithmic Music MARY SIMONI	531
31. Technology, Creativity, and the Social in Algorithmic Music CHRISTOPHER HAWORTH	557
32. Algorithms and Computation in Music Education ANDREW BROWN	583
33. (Micro)Politics of Algorithmic Music: Towards a Tactical Media Archaeology GEOFF COX AND MORTEN RIIS	603
34. Algorithmic Music for Mass Consumption and Universal Production YULI LEVTOV	627

Perspectives on Practice D

35. Algorithmic Trajectories 647
ALEX MCLEAN AND ROGER T. DEAN

Index

659