References

[1] Michael A. Arbib. From universal turing machines to self-reproduction. In Rolf Herken, editor, *The Universal Turing Machine — A Half-Century Survey*, volume 2 of *Computerkultur*, pages 161–172. Springer-Verlag, Wien-New York, 1995.

[2] Michael J. Beeson. Computerizing mathematics: Logic and computation. In Rolf Herken, editor, *The Universal Turing Machine — A Half-Century Survey*, volume 2 of *Computerkultur*, pages 173–205. Springer-Verlag, Wien-New York, 1995.

[3] Charles H. Bennett. Logical depth and physical complexity. In Rolf Herken, editor, *The Universal Turing Machine — A Half-Century Survey*, volume 2 of *Computerkultur*, pages 206–235. Springer-Verlag, Wien-New York, 1995.

[4] Allen H. Brady. The busy beaver game and the meaning of life. In Rolf Herken, editor, *The Universal Turing Machine — A Half-Century Survey*, volume 2 of *Computerkultur*, pages 237–254. Springer-Verlag, Wien-New York, 1995.

[5] Gregory J. Chaitin. An algebraic equation for the halting probability. In Rolf Herken, editor, *The Universal Turing Machine — A Half-Century Survey*, volume 2 of *Computerkultur*, pages 255–259. Springer-Verlag, Wien-New York, 1995.

[6] Michael Conrad. The price of programmability. In Rolf Herken, editor, *The Universal Turing Machine — A Half-Century Survey*, volume 2 of *Computerkultur*, pages 261–281. Springer-Verlag, Wien-New York, 1995.

[7] Elias Dahlhaus and Johann A. Makowsky. Gandy's principles for mechanisms as a model of parallel computation. In Rolf Herken, editor, *The Universal Turing Machine — A Half-Century Survey*, volume 2 of *Computerkultur*, pages 283–288. Springer-Verlag, Wien-New York, 1995.

[8] Martin Davis. Mathematical logic and the origin of modern computers. In Rolf Herken, editor, *The Universal Turing Machine — A Half-Century Survey*, volume 2 of *Computerkultur*, pages 135–158. Springer-Verlag, Wien-New York, 1995.

[9] Martin Davisis. Influences of mathematical logic on computer science. In Rolf Herken, editor, *The Universal Turing Machine — A Half-Century Survey*, volume 2 of *Computerkultur*, pages 289–299. Springer-Verlag, Wien-New York, 1995.

[10] Solomon Feferman. Turing in the land of $o(z)$. In Rolf Herken, editor, *The Universal Turing Machine — A Half-Century Survey*, volume 2 of *Computerkultur*, pages 103–134. Springer-Verlag, Wien-New York, 1995.

[11] Jens Erik Fenstad. Language and computations. In Rolf Herken, editor, *The Universal Turing Machine — A Half-Century Survey*, volume 2 of *Computerkultur*, pages 301–321. Springer-Verlag, Wien-New York, 1995.

[12] David Finkelstein. Finite physiks. In Rolf Herken, editor, *The Universal Turing Machine — A Half-Century Survey*, volume 2 of *Computerkultur*, pages 323–347. Springer-Verlag, Wien-New York, 1995.

[13] Robin Gandy. The confluence of ideas in 1936. In Rolf Herken, editor, *The Universal Turing Machine — A Half-Century Survey*, volume 2 of *Computerkultur*, pages 51–102. Springer-Verlag, Wien-New York, 1995.

[14] Oded Goldreich. Randomness, interactive proofs, and zero-knowledge — a survey. In Rolf Herken, editor, *The Universal Turing Machine — A Half-Century Survey*, volume 2 of *Computerkultur*, pages 349–375. Springer-Verlag, Wien-New York, 1995.

[15] Yuri Gurevich. Algorithms in the world of bounded resources. In Rolf Herken, editor, *The Universal Turing Machine — A Half-Century Survey*, volume 2 of *Computerkultur*, pages 377–385. Springer-Verlag, Wien-New York, 1995.

[16] Brosl Hasslacher. Beyond the turing machine. In Rolf Herken, editor, *The Universal Turing Machine — A Half-Century Survey*, volume 2 of *Computerkultur*, pages 387–402. Springer-Verlag, Wien-New York, 1995.

[17] Andrew Hodges. Alan turing and the turing machine. In Rolf Herken, editor, *The Universal Turing Machine — A Half-Century Survey*, volume 2 of *Computerkultur*, pages 3–14. Springer-Verlag, Wien-New York, 1995.

[18] Stephen C. Kleene. Turings's analysis of computability, and major applications of it. In Rolf Herken, editor, *The Universal Turing Machine — A Half-Century Survey*, volume 2 of *Computerkultur*, pages 15–49. Springer-Verlag, Wien-New York, 1995.

[19] Moshe Koppel. Structure. In Rolf Herken, editor, *The Universal Turing Machine — A Half-Century Survey*, volume 2 of *Computerkultur*, pages 403–419. Springer-Verlag, Wien-New York, 1995.

[20] Johann A. Makowsky. Mental images and the architecture of concepts. In Rolf Herken, editor, *The Universal Turing Machine — A Half-Century Survey*, volume 2 of *Computerkultur*, pages 421–432. Springer-Verlag, Wien-New York, 1995.

[21] Donald Michie. The fifth generation's unbridged gap. In Rolf Herken, editor, *The Universal Turing Machine — A Half-Century Survey*, volume 2 of *Computerkultur*, pages 433–454. Springer-Verlag, Wien-New York, 1995.

[22] Roger Penrose. On the physics and mathematics of thought. In Rolf Herken, editor, *The Universal Turing Machine — A Half-Century Survey*, volume 2 of *Computerkultur*, pages 455–483. Springer-Verlag, Wien-New York, 1995.

[23] Robert Rosen. Effective processes and natural law. In Rolf Herken, editor, *The Universal Turing Machine — A Half-Century Survey*, volume 2 of *Computerkultur*, pages 485–498. Springer-Verlag, Wien-New York, 1995.

[24] Helmut Schnelle. Turing naturalized: von neumann's unfinished project. In Rolf Herken, editor, *The Universal Turing Machine — A Half-Century Survey*, volume 2 of *Computerkultur*, pages 499–517. Springer-Verlag, Wien-New York, 1995.

[25] Uwe Schöning. Complexity theory and interaction. In Rolf Herken, editor, *The Universal Turing Machine — A Half-Century Survey*, volume 2 of *Computerkultur*, pages 519–536. Springer-Verlag, Wien-New York, 1995.

[26] John C. Shepherdson. Mechanisms for computing over arbitrary structures. In Rolf Herken, editor, *The Universal Turing Machine — A Half-Century Survey*, volume 2 of *Computerkultur*, pages 537–555. Springer-Verlag, Wien-New York, 1995.

[27] Boris A. Trakhtenbrot. Comparing the church and turing approaches: Two prophetical messages. In Rolf Herken, editor, *The Universal Turing Machine — A Half-Century Survey*, volume 2 of *Computerkultur*, pages 557–582. Springer-Verlag, Wien-New York, 1995.

[28] Oswald Wiener. Form and content in thinking turing machines. In Rolf Herken, editor, *The Universal Turing Machine — A Half-Century Survey*, volume 2 of *Computerkultur*, pages 583–607. Springer-Verlag, Wien-New York, 1995.