Computational Complexity

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1 Babbage's Vision and Hilbert's Dream

1. Computing With Steam

2. The Foundations of Mathematics

2 Universality and Undecidability

1. Diagonalization and Halting

2. The Halting Problem

3. Recursive Enumerability

4. A Tower of Gods

5. From Undecidable Problems to Unprovable Truths

3 Building Blocks: Recursive Functions

1. Building Functions From Scratch

2. A Universal Function