



FTBU: Theory of Computation

From the Bottom Up Series

Lecture Outline

A whirlwind through theory of computation

01

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What defines computing?

- First, what's a good definition?
- Input \rightarrow Machine/Program/Algorithm \rightarrow Output
- The idea of a one process being more complex than another, general complexity

02

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Mathematical concepts

- Set theory basics
- The basic concepts of cardinality and countability

03

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Machines

- Descriptions of
 - FSA
 - Turing machine

04

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Discussion of the idea of something being "uncomputable"

