

# Class 32: Computability in Theory and Practice



CS150: Computer Science  
University of Virginia  
Computer Science

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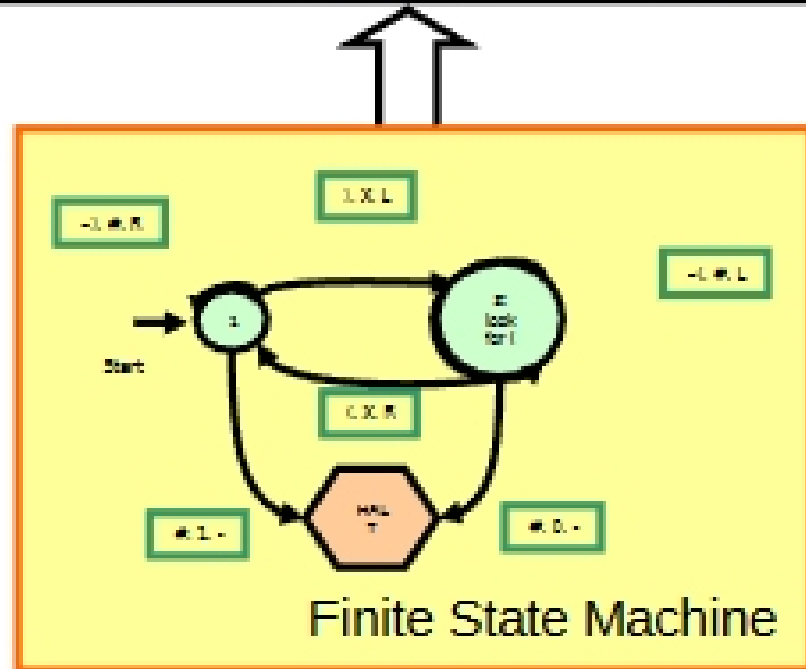
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- Lambda Calculus Review
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# Universal Computation



Read/Write Infinite Tape

Mutable Lists

Finite State Machine

Numbers to keep track of state

Processing

Way of making decisions (if)

Way to keep going

To prove Lambda Calculus is as powerful as a UTM, we must show we can make everything we need to simulate any TM.