Automated Verification = Graphs, Automata, and Logic

Moshe Y. Vardi
Department of Computer Science
Rice University
vardi@cs.rice.edu

In automated verification one uses algorithmic techniques to establish the correctness of the design with respect to a given property. Automated verification is based on a small number of key algorithmic ideas, tying together graph theory, automata theory, and logic. In this self-contained talk I will describe how this "holy trinity" gave rise to automated-verification tools.

References

[1] An automata-theoretic approach to linear temporal logic (Banff'94). Available from http://www.cs.rice.edu/~vardi/papers.