

Timed  
automaton



```
graph LR; A[Timed automaton] --> B[Model checking  
State space exploration]; B --> C[Correct system]; B --> D[Execution trace];
```

The diagram illustrates a model checking workflow. It begins with a 'Timed automaton' box on the left, which points via a thick black arrow to a central 'Model checking' container. This container has a light gray background and rounded corners, and it contains a blue rectangle labeled 'State space exploration'. From the right side of the 'Model checking' container, a thick black arrow splits into two paths. The upper path leads to a 'Correct system' box, and the lower path leads to an 'Execution trace' box. Both output boxes are white with black borders.

Model checking

State space  
exploration

Correct  
system

Execution  
trace