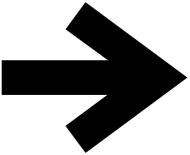
Formal Methods

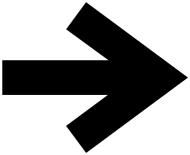
Reactive Synthesis

`Design correct-by-construction controller'



Formal Specifications



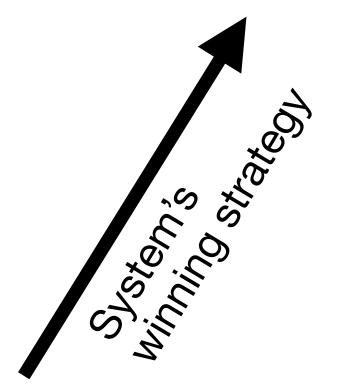


A system that satisfies the specification

Open Systems



Game $G(\mathcal{A}_{\varphi}, I, O)$





```
Deterministic Parity Automaton \mathscr{A}_{\varphi}
```





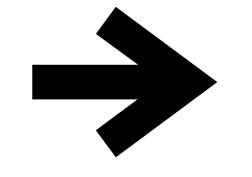
Formal Methods

Formal Specifications over $I \cup O$

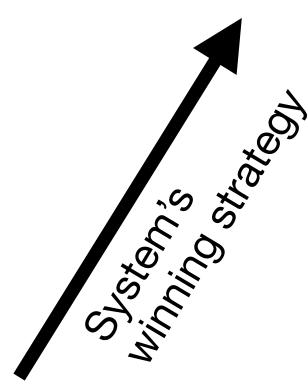
Reactive Synthesis

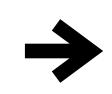
Design correct-by-construction controller'

Open Systems



A system that satisfies the specification





LTL formula φ \longrightarrow Deterministic Parity Automaton \mathscr{A}_{φ} \longrightarrow Game $G(\mathscr{A}_{\varphi}, I, O)$



Example

Higher Logical Layer

