Paper	Category	Input	Main Approach	Need Extra Human Interactions	Output	Benefits of the system
Specification Extraction by Symbolic Execution	Formula Extraction	1) program in pseudo code ; 2) user provided input for the program	dynamic symbolic execution guided by concrete program execution	Yes	Computation Formula and Path Conditions	Understand the essential computation and constraints of complex programs
Prospex: Protocol Specification Extraction	Protocol Analysis	sequence of typed messages between clients and servers	reverse engineering the protocol state machine	No	application-level protocol specification: meaningful message formats and protocol state machines	automatically find vulnerabilities in real-world applications