

# The era of self-modifying virus (90's)

The **Chameleon** family (1990)

**Ply** (1996)

- DOS 16-bit based complicated polymorphic virus with built-in permutation engine

# Anatomy of a “polymorphic” virus

A **polymorphic virus** mutates when replicating  
(but keeps the original algorithm intact)

- By using cryptography
- By injecting garbage code
- By doing permutations within certain instructions or block of instructions
- By using code obfuscation technique

How to detect it?

➡ By detecting code patterns used for the self-modification