Why Rules Fail and Learning Works

Traditional Programming

IF-THEN Rules:

IF has_triangle_top THEN maybe_A

IF has_horizontal_bar THEN maybe_A

IF two_diagonal_lines THEN maybe_A

IF all_conditions THEN is_A
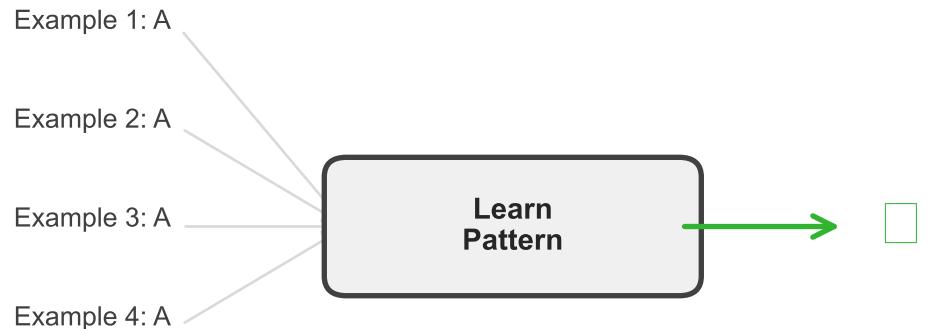
...

But what about cursive?

What about rotated?

What about stylized?

☐ **Impossible to cover all cases!**

Machine Learning

Learning from Examples:

Example 1: A

Example 2: A

Example 3: A

Example 4: A

Learn Pattern

☐ **Handles any variation!**