

**Dafnis, Spiros D.; Philippou, Andreas N.**

**Distributions of patterns with applications in engineering.** (English) Zbl 1229.60086  
IAENG, Int. J. Appl. Math. 41, No. 1, 68-75 (2011).

Summary: We deal with two different problems concerning engineering, the moving window detection problem and weaning from mechanical ventilation. We review the research on these two areas and contribute to it by studying waiting time distributions of patterns of two successes separated by at most or exactly  $k - 2$  failures ( $k \geq 3$ ) in the case of first-order dependent trials.

**MSC:**

**60J20** Applications of Markov chains and discrete-time Markov processes on general state spaces (social mobility, learning theory, industrial processes, etc.)

Cited in **5** Documents