Detecting linear sequences and subsequences†

Yanming Di⁎, Michael D. Perlman⁎

⁎Department of Statistics, University of Washington, Seattle, WA 98195, USA

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Abstract

Greenwood (1946), using an $L_2$ distance, and others have addressed the question of detecting a too-linear fit of the occurrence times $T_0 < T_1 < \cdots < T_n$ of a sequence of random events. Two convenient distances are introduced here, then applied to the more challenging problem of detecting too-linear subsequences, where the multiple subsequence effect must be taken into account. Two interpretations of “linear subsequence” are considered.

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⁎ Corresponding author, Tel.: +1 206 543 7735; fax: +1 206 685 7428.

E-mail addresses: diy@stat.washington.edu, michael@stat.washington.edu