

Tecniche di Failure Analysis basate su Compressive Sampling

D. Gambarotto

Abstract

Il rilevamento di failures in array di grandi dimensioni rappresenta un problema tecnologico e teorico di grande complessità ed importanza a livello pratico. Dati gli elevati costi necessari per le misure di campo necessarie a valutare tali failures, tecniche in grado di ridurre i tempi di acquisizione ed altresì individuare guasti semplicemente sono di grande interesse. A tali fine, l'utilizzo di tecniche basate sul Compressive Sampling potrebbe rappresentare un tool efficace per (a) permettere una veloce valutazione dei guasti (b) fornire indicazioni sull'affidabilità della valutazione (c) ridurre il numero di misure necessarie ad effettuare il collaudo di una schiera di grandi dimensioni.

Obiettivo della presente attività è quindi quello di estendere i tool sviluppati sulla detection di failures in array di grandi dimensioni mediante l'uso di metodologie CS basate su formulazioni di L1-convex minimization [L1-Magic].

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Supervisors: Prof. Andrea Massa, Dr. Giacomo Oliveri.