Diagnosis as Planning Revisited: An Abridged Report*

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ABSTRACT

In the spirit of past contributions to the formal characterization of diagnosis (e.g., (Reiter, 1987; de Kleer *et al.*, 1992)) this paper presents a formal characterization of diagnosis of discrete dynamical systems, appealing to the situation calculus. It then proceeds to establish a correspondence between computing dynamical diagnoses and generating plans. It is this correspondence that we feel may be of particular interest to the DX community. Planning technology provides tailored representations and fast, efficient algorithms for automated plan generation. This paper shows how such technology can be brought to bear on the problem of generating diagnoses. Initial experiments support our claim that planning technology holds great promise for efficient generation of diagnoses.

REFERENCES

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