Modelling and control of a robotic integrated system

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SUMMARY

A robotic integrated system is described by Hybrid Communicated Sequential Programming Language HCSP and is modelled by AUTOMATA. Robots and their peripheral equipment construct a typical hybrid system which has a lot of phase transitions between control laws driven by the internal or external events. Using hybrid control methodology can not only elucidate the issues clearly but also make the hybrid controller perform better during control process. Based on hybrid control method, an experiment which involves robots and its peripheral equipment has been made in our laboratory.