

Web-Based Synthesis of Robot Structures for Micro and Nano Manipulations

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- Abstract** This paper describes how the web technologies are utilized for a robot system synthesis. A web application is created for automation of the synthesis of closed structures for micro- and nano-applications, utilizing the advantages tense piezo-actuators and closed robot kinematical structures. The algorithm, integrated into the developed web based application, offers a synthesis of robot kinematic chains without extensive knowledge in this domain. The aim is to facilitate synthesis of such kind of kinematic chains from specialists who will generate optimal solutions for automation and robotisation of the requested micro- and nano-process.