



Visual Servoing via Advanced Numerical Methods [

Chesi, Graziano

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Monografía

The text of Visual Servoing via Advanced Numerical Methods has its roots in an invited session presented at the IEEE International Conference on Robotics and Automation at Kobe in May 2009. The work presented here has been much expanded and gives a comprehensive overview of the state of the art in this important area of robotics. The latest contributions from well-known experts in visual servoing provide the reader with solutions to the fundamental and specific problems that have to be solved in using camera-derived feedback to control robotic motion and make it imitative of the actions of human beings. These solutions are based on dedicated numerical methods the development of which has been facilitated by recent progress in video devices, computer hardware and optimisation techniques. The book is organised into three parts reflecting: the uses of image processing and computer vision; control, optimal and robust control; and stability, performance and robustness analysis in visual servoing

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