

Preface

Much computer vision research focuses on the physics of vision or image formation, as well as the analysis and understanding of natural scenes. The work here, on the other hand, deals strictly with human artifacts: engineering drawings and maps. Although electronic artifacts dominate our world today, there remain many legacy documents which require automated analysis. For example, many times in the past only paper drawings were acquired for vehicles and parts, and the only way to make them accessible is to digitize and catalog them for current users. Given that these documents can number in the thousands, this is too much to accomplish by hand.

As for maps, these too exist in profuse numbers, including historical documents, which motivates their automated analysis. In addition, it is often useful to register these with digital imagery, and the discovery of semantic features is essential for this task.

The search for algorithms to automate such analysis has been underway since the beginning of digital image processing, and progress has been steady in attaining the level of performance of today's systems. This book describes the state of the art in engineering drawing and raster map analysis and provides a starting point for future research in this area.

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Analysis of Engineering Drawings and Raster Map
Images

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