

# Preface

Creating a practical Chinese handwriting recognizer from scratch is no mean feat. First of all, you need to ensure the availability of sufficient handwritten samples and/or have to collect your own. It took my group three entire years to compile the HIT-MW database. The design and implementation involves thorough evaluation of the state-of-the-art algorithms, ranging from image preprocessing and feature extraction to classifier training and path decoding. You also need to balance the efficacy and training workload. Thus, this book is devoted to helping interested researchers/engineers/students quickly embark on their study of Chinese handwriting recognition.

This work also reflects my ten years of experience in Chinese handwriting recognition. First, it presents an overview of Chinese handwriting recognition within the context of the character recognition field, with an emphasis on the algorithmic developments and shifts from standard databases. Considering the huge challenges posed by realistic Chinese handwriting recognition, we had to stand on the shoulders of giants. Two strategies, the segmentation-free and integrated segmentation-recognition strategy, are pursued in the literature. Recent developments in these strategies are investigated and algorithms that have worked well in practice are primarily focused on in this book. In order to provide a concrete and valuable reference resource, all algorithms are tested on standard databases.

The book employs a “simple-to-complex” organizing principle. As such, the division of the chapters is not on the basis of system components, e.g., preprocessing, feature extraction, classifier design, etc. Instead, baseline systems are initially presented and are subsequently expanded on and incrementally improved. For better comprehension, the first chapter provides a bird’s-eye view and [Chap. 2](#) presents a dedicated scheme for establishing the HIT-MW database. In this way, readers have the freedom to begin with whichever chapter they prefer.

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