

Designing Human Interface in Speech Technology

Fang Chen. 2006. New York: Springer. [ISBN 0-387-24155-8. 382 pages, including index. \$89.95USD.]

Yes, you read the title of this book correctly. It is not a typo. It really is ungrammatical. It is also a clear portend of things to come in the pages that follow. Springer (though not Dr. Chen, the author) should be deeply embarrassed about producing this book. The book is full of typical non-native English errors--number violations, missing articles, curious diction, weird preposition choices, and the like. Here is a brief (highly representative) example, before I move on to the content:

Researchers and development engineers may tell lofty ideas on speech input prospective aspects with their deep philosophical and practical experiences standing firm on the rolling deck. These may be based on a lot of premises that cannot tell at once and are sometimes implicitly hidden in explanations. We, vendors and the users, including the managements and the end users, must know and understand this nature of engineers. (6)

Springer should, by the way, be further embarrassed by the lack of graphic support they gave Dr. Chen. The figures are full of cheap clip art and show little geometrical consistency or sense of graphic design. Editorially, in short, this monograph is a disgrace.

Conceptually, the news is only a little better. The summaries Chen offers of voice-interaction projects are generally good, if terse, and the chapter on speech technology in military applications is very useful. On balance, Chen provides helpful surveys of typical applications for which voice interfaces have been developed, especially in the 1990s (the research is slightly dated, but research dates very quickly in this field), and of the chief features of those interfaces.

The remainder of the book, however, is less rewarding. Chen includes overviews of basic neuropsychology, relevant cognitive factors (attention, workload, and stress), and design analysis methodologies, as well as of human factors and usability issues in speech interaction design. But, with the exception of neuropsychology, all of them are better handled by other (less expensive, better written, more professionally published) books on voice-interaction design (for instance, Cohen et al. 2004, Gardner-Bonneau 1999, and Kotelly 2003). And neuropsychology overviews can be found in scores of books; nor does Chen sufficiently integrate this material with voice interaction design.

Corporate and academic libraries for institutions with sufficient voice-interaction personnel should probably have a copy of this book on hand, for the effective literature-review sections (two chapters), but most individual designers and researchers can find better uses for their money.

Works cited

- Cohen, Michael H., James P. Giangola, and Jennifer Balogh. 2004. *Voice user interface design*. Boston: Addison-Wesley Professional.
- Gardner-Bonneau, Daryle, ed. 1999. *Human factors and voice interactive systems*. Boston: Kluwer Academic Publishers.
- Kotelly, Blade. 2003. *The art and business of speech recognition: Creating the noble voice*. Boston: Addison-Wesley Professional.

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