Table 1.1 Major differences between academic and deployed spoken dialog syst

	Area	Academic systems	Deployed systems
1	Speech recognition	Statistical language models	Rule-based grammars, few statistical language models
2	Spoken language understanding	Statistical named entity tagging, semantic tagging, (shallow) parsing [9, 78, 87]	Rule-based grammars, key-word spotting, few statistical classifiers [54, 120, 128]
3	Dialog management	MDP, POMDP, inference [63, 66, 143]	Call flow, form-filling [86, 89, 108]
4	Language generation	Statistical, rule-based	Manually written prompts
5	Speech generation	Text-to-speech synthesis	Pre-recorded prompts
6	Interfaces	Proprietary	VoiceXML, SRGS, MRCP, ECMAScript [19, 32, 47, 72]
7	Data and technology	Often published and open source	Proprietary and confidential
8	Typical dialog duration	40 s, 5 turns [29]	277 s, 10 turns [confidential source]
9	Corpus size	100s of dialogs, 1000s of utterances [29]	1,000,000s of dialogs and utterances [118]
10	Typical applications	Tourist information, flight booking, bus information [28, 65, 96]	Call routing, package tracking, phone billing, phone banking, technical support [6, 43, 76, 88]
11	Number of scientific publications	Many	Few

COMPOSANTE SDOHM

Recherche

Industrie

Extrait de « Advances in Commercial Deployment of Spoken Dialog Systems », David Suendermann, Springer Verlag, 2011.