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	Autore	Michael Thilo
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	Edizione	[1st ed. 2023.]
	Descrizione fisica	1 online resource (157 pages)
	Collana	T-Labs Series in Telecommunication Services, , 2192-2829
	Disciplina	006.248392
	Soggetti	Signal processing
		User interfaces (Computer systems)
		Human-computer interaction
		Natural language processing (Computer science)
		Acoustical engineering
		Digital and Analog Signal Processing
		User Interfaces and Human Computer Interaction
		Natural Language Processing (NLP)
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	Lingua di pubblicazione	Inglese
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	Nota di contenuto	Introduction -- Speech Transmission -- Simulation Architecture -- Simulating Interactivity and Delay -- Simulating Conversation Disruptions and Packet Loss -- Conversational Quality Predictions -- Conclusion.
	Sommario/riassunto	This book discusses the simulation of conversations through a novel approach of predicting speech quality based on the interactions of two simulated interlocutors. The author describes the setup of a simulation environment that is capable of simulating human dialogue on the speech level. The impact of delay and bursty packet loss on VoIP conversations is investigated and modeled for the use in the simulation. Based on parameters extracted from simulated conversations, the author proposes extensions to the E-model, a parametric model standardized by the International Telecommunications Union, in order to predict the quality of the

simulated conversations. The author shows that predictions based on the simulated conversations outperform models that rely on the transmission parameters alone. Presents the overview of a technical setup of a simulation able to replicate individual interactions Includes insights into the changes of individual interactions that occur due to delay and packet loss Describes and extends the state-of-the-art in parametric speech quality prediction .