
Preface

This work has been a most rewarding task, allowing me to reach into the world of mobile communications. This, along with learning concepts and tools of signal processing, has given me much valuable insight that I now can apply not only in the field of telecommunications but in most areas of engineering.

First and foremost, my thanks go to Prof. Iiro Hartimo, Lab. of Signal Processing and Computer Tech., HUT, for his great patience with my work, and most profoundly, for making the work possible altogether. He could be described as the Father behind me, and also, let me mention that he has had a very flexible mind in the matters like my conference travel plans. I would like to express my most sincere gratitude to Prof. Seppo Ovaska, Lab. of Electric Drives and Power Electronics, HUT, for his ever ready and remarkably profound coaching during these first steps on my path towards a scientific career. His work I have found most valuable; with his guidance, he has set me a standard for creating quality publications, and also for scientific work in general. These standards let me not ever forget. A glimpsing thought goes through my mind that this Thesis is probably written somewhat too fast to escape his red pen (but I'm not going to show this to him until after binding). Also, thanks are due to Prof. Timo Laakso, Lab. of Telecommunications Tech., HUT, for cooperation and guidance during the yearly stages of my work. Prof. Sven-Gustav Häggman, Communications Lab., HUT, is acknowledged for most kindly reading and commenting the Thesis. My many thanks extend to a coworker Lic.Tech. Aiping Huang, Lab. of Signal Processing and Computer Tech., HUT, for her guidance in many theoretical matters, and for her tirelessly ever friendly cooperation also otherwise. She never stopped smiling no matter how close our publication deadlines were. Research for this Thesis was carried out in parallel with hers, presented in her Licentiate Thesis [Hua97]. She has provided part of the predictors employed in the simulations presented here. For help in simulation matters, I am in debt to M.Sc. Jari Mattila, and thanks also go to M.Sc. Timo Korhonen and Lic.Tech. Michael Hall for many theoretical discussions in which they were always ready to take the time to make me understand several difficult things. All three are with Communications Lab. of HUT. Last but not least, I would like to thank the whole personnel of Laboratory of Signal Processing and Computer Technology for being a lively, very refreshing, and most friendly group in which I have found it fabulous to do scientific work. Let the spirit of Café Signal never fade, and let it inspire many generations of signal processing researchers to come.

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