

Contents

1	Mental Health Informatics: Current Approaches.	1
	Joachim Diederich and Insu Song	
2	The Rise of Person-Centered Healthcare and the Influence of Health Informatics and Social Network Applications on Mental Health Care.	17
	Michelle Burke Parish and Peter Yellowlees	
3	The Changing Doctor-Patient Relationship: A Move to Anytime, Anywhere.	41
	Najia Nafiz and Peter Yellowlees	
4	Novel Approaches to Clinical Care in Mental Health: From Asynchronous Telepsychiatry to Virtual Reality.	57
	Abdullah Maghazil and Peter Yellowlees	
5	Speech Analysis for Mental Health Assessment Using Support Vector Machines.	79
	Insu Song and Joachim Diederich	
6	Social Networks and Automated Mental Health Screening.	107
	Insu Song and John Vong	
7	Generating Explanations from Support Vector Machines for Psychological Classifications.	125
	Insu Song and Joachim Diederich	
8	An Alternative Method of Analysis in the Absence of Control Group.	151
	Felin, Joachim Diederich and Insu Song	

**9 Stress and Emotion Recognition Using Acoustic
Speech Analysis 163**
Margaret Lech and Ling He

10 Detection and Prediction of Clinical Depression. 185
Margaret Lech, Lu-Shih Low and Kuan Ee Ooi

**11 Automated Method for Diagnosing Speech and Language
Dysfunction in Schizophrenia 201**
Anne Debra Tilaka, Joachim Diederich, Insu Song
and Ai Ni Teoh

12 Suicide Risk Analysis 217
Carol Choo, Joachim Diederich, Insu Song and Roger Ho

**13 Using Diagnostic Information to Develop a Machine
Learning Application for the Effective Screening
of Autism Spectrum Disorders 229**
Tze Jui Goh, Joachim Diederich, Insu Song and Min Sung

Conclusions. 247

Index 249