Contents

Note	es on the Editors and Contributors	V111
	RODUCTION a Price, Carey Jewitt and Barry Brown	1
PAR	TT 1: AN INTRODUCTION TO THE FIELD OF CONTEMPORARY DIGITAL TECHNOLOGY RESEARCH	7
1.	The Historical Context Paul Ceruzzi	9
2.	The Field of Digital Technology Research Charles Crook	26
PAF	RT 2: NEW DIGITAL TECHNOLOGIES: KEY CHARACTERISTICS AND CONSIDERATIONS	41
3.	Context, Location and Mobility: A Human Story Matt Jones	43
4.	Online Information: Access, Search and Exchange Gary Hsieh and Nicolas Friederici	58
5.	Social Media, Human Connectivity and Psychological Well-being <i>Sonja Baumer</i>	71
6.	Engaging Practices: Doing Personalized Media Heather A. Horst and Larissa Hjorth	87
7.	Ethics, Phenomenology and Ontology Anna Kouppanou and Paul Standish	102

vi CONTENTS

PAR	TT 3: RESEARCH PERSPECTIVES FOR DIGITAL TECHNOLOGIES: THEORY AND ANALYSIS	117
8.	Critical Theory of Technology Sara M. Grimes and Andrew Feenberg	121
9.	Critical and Cultural Approaches to HCl Jeffrey Bardzell	130
10.	Theories of Embodiment in HCI Paul Marshall and Eva Hornecker	144
11.	Space and Place in Digital Technology Research: A Theoretical Overview Luigina Ciolfi	159
12.	Affect and Experiential Approaches Kristina Höök	174
13.	Ethnographic Approaches to Digital Research Barry Brown	189
14.	The Mediational Perspective on Digital Technology: Understanding the Interplay between Technology, Mind and Action Victor Kaptelinin	203
15.	Ethnomethodology and Conversation Analysis: Empirical Approaches to the Study of Digital Technology in Action <i>Robert J. Moore</i>	217
16.	Behavioral Trace Data for Analyzing Online Communities Cliff Lampe	236
17.	Multimodal Methods for Researching Digital Technologies Carey Jewitt	250
18.	Projection, Place, and Point-of-view in Research through Design Steven Dow, Wendy Ju and Wendy Mackay	266
19.	Design Research: Observing Critical Design Laurel Swan and Kirsten Boehner	286

CONTENTS vii

PAR	TT 4: ENVIRONMENTS AND TOOLS FOR DIGITAL RESEARCH	303
20.	Tangibles: Technologies and Interaction for Learning Sara Price	307
21.	Material Computing: Integrating Technology into the Material World Leah Buechley	326
22.	Haptic Interfaces Eve Hoggan	342
23.	Contrasting Lab-based and In-the-wild Studies for Evaluating Multi-user Technologies Yvonne Rogers, Nicola Yuill and Paul Marshall	359
24.	Ubiquitous Virtual Reality Environments Yoosoo Oh and Woontack Woo	374
25.	Location-based Environments and Technologies Ty Hollett and Kevin M. Leander	387
26.	Mobile Learning in the Majority World: A Critique of the GSMA's Position Niall Winters	402
27.	Online and Internet-based Technologies: Gaming Catherine Beavis	412
28.	Online and Internet-based Technologies: Social Networking Kirsty Young	427
29.	Learner Modelled Environments Kaśka Porayska-Pomsta and Sara Bernardini	443
30.	The Interplay Between Research and Industry: HCI and Grounded Innovation Lars Erik Holmquist	459
Afte	Afterword: Looking to the Future	
Inde	Sara Price, Carey Jewitt and Barry Brown Index	