Index

A
Activity Circle 201-203, 205-209, 211-214, 217
Activity Circle interface 206-209, 214
Adaptive Hypermedia 253, 296, 303-304
Adaptive Learning 296, 304
Adaptive Systems 296, 303
AHA 296
Alpha soft keyboards 34
Angle-Fitts additivity model 146, 148-149
Artificial Intelligence (AI) 180
tentional guidance 87
attention tunneling 71, 83
automata 224-226, 228, 230-231
Autonomic Nervous System (ANS) 236, 238

B
Backwards Accelerating 289
Backwards Decelerating 289-291
banner blindness 87
Beyond Pages 306
Blackboard 296, 303
Bookmarks 4, 9-10, 42-44, 46, 48, 51-53
Bootstrap Discovery Behaviour (BDB) 258, 262, 274
bootstrapping 262
Business Process Management (BPM) 202

C
category learning theory 106-107
cognitive behaviour models 236
Cognitive Costs (CC) 27
cognitive load theory 102
Colored Petri Nets (CPN) 243
Computed Tomography Angiography (CTA) 69
conceptual metaphor 107, 110
Configuration space 140-144, 146-147, 149-152
conversational agents 177-179, 182, 185, 194, 196-197
Convex Hull Model 147
Cornea 59, 66
Currency converter 223, 225-226, 229, 231-232
Curved Planar Reformation (CPR) 70, 80

D
DashKey 28-32, 34-36
Degrees Of Freedom (DOF) 141
density deviation assumption 72
DiaMeta 129, 132
Direct Current (DC) 314
Direct Volume Rendering (DVR) 70, 80
distributed intelligence 101
Distributed viscosity 201-203, 205-206, 209-212, 214, 216
Down Syndrome (DS) 265

E
Electro-Oculogram (EOG) 57
entering message 220
ergonomic user interfaces 237, 251, 253, 257
error detection cues 70, 72
Error Pattern 295, 298, 300-301, 303-304
Executive Process-Interactive Control (EPIC) 162

F
Fast Increasing 288-289
Favorites - See Bookmarks.
Fitts’ law 22-24, 26, 29-30, 38, 141, 144, 146-147, 152-154
Five Factor Model (FFM) 184

G
Gaze interface 56-57, 59, 65-66
Gaze tracking 57-59, 65-66
Index

GOMS 22, 24, 38
Graph Pattern Meta-Model (GPMM) 133

H
Hawthorne Effect 14, 16
Human Factors Analysis and Classification System (HFACS) 240
human workload 237
Hyck-Hyman’s law 26, 28
HyperHistory 43, 53

I
imperceptible objects 98-100, 104-107, 109-114, 116-120, 124
influence operators 177-178, 187, 194-196
information gathering 2
Information Plant Organic Technique (i-Pot) 44
Infrared LEDs (IR-LEDs) 60
Integrated Circuit (IC) 307
intellectual partnership 101
Intelligent agents 177-178, 182, 198-200
Intelligent Systems 176, 304
interest point method 90
International Classification of Functioning, Disability and Health (ICF) 239, 255
International Standards Organization (ISO) 260
iPad 57-58, 62, 66
iPod touch 60, 66
Isosurface 70, 72-73, 75, 80, 83
Italian Association of Persons with Down Syndrome (AIPD) 266

K
Keystroke Level Model (KLM) 162
Kototama 312-314, 316, 319

L
Layout behavior 125, 127-131, 133, 135, 137-138
Light-Emitting Diode (LED) 313
Localization Task (LT) 27

M
Magnetic Resonance Angiography (MRA) 69
map browser 64
mental configuration space 140-143, 146-147, 151-152
mental map 126, 128, 139
MessagEase 28-32, 35-36
method of adjustment 291
Microsoft Instant Messenger (MIM) 8
Midas-touch problem 56, 59, 66
Middle Mouse Button (MMB) 75
Mindmaps 125, 129-130
Mini Mental State Exam (MMSE) 266
Minimum Time (MT) 24-25
MobiGaze 56-58, 64-65
Model Configuration 245
model cycles 245
model parameterization 249
model programming language 243
Monte Carlo (MC) 259
Multi-Agents Systems (MAS) 180
Multi Row Bookmarks Toolbar 4
Multi-Session-Task (MST) 2, 19
Multitasking Bar (MB) 1, 3-5
Multi-Tasks (MT) 1-2, 19

N
Neuroticism Extraversion Openness Personality Inventory (NEO PI-R) 185
non-salient distractors 86
Non-Task 7

O
operator behaviour 238-239, 252

P
pacing behaviors 280-282, 287, 292
Partial Concurrent Thinking Aloud (PCTA) 266
Partial Least Square (PLS) 213
Participative and Formative Oriented (PFO) 264
pattern-specific meta-model 133
Perceived Behavioral Control (PCB) 212
Perceived Distributed Viscosity (PDV) 205
perceptual equilibrium 291-292
Performance Moderators Functions (PMFs) 183
personality traits 177-179, 181-185, 187-189, 195-197, 199-200
Pilot Survey 4
Point Of Gaze (POG) 58
pop-out priming 92
Programmable User Model (MoPUs) 237
Progress bars 280-282, 284, 286-292
Psychotism, Extraversion, Neuroticism (PEN) 185
Purkinje image 63, 66
Index

Q
QA-reasoning 158-159, 162-164, 166
QWERTY 26, 28

R
Radio Frequency IDentification (RFID) 307
rational agent 177-182, 195, 200
Rational Unified Process (RUP) 161
realistic user model 246
Recognition tasks 45-46
representational effect theory 101
Right Mouse Button (RMB) 75

S
saliency maps 87-88, 91-92
salient distractors 86, 89
Scenario specification 245
Searching Task (FT) 27
Selection Task (ST) 27
SequenceBook 305-309, 311, 313, 316, 318-319
seven ribbed behaviors 288, 290
SmartBack 42, 53
Social Proxy 201, 204, 206, 209, 214
Social Software 202-203, 205, 215-217
Software Intensive Systems (SISs) 157
squint test 90-91
state machine 224
static and dynamic user characteristics 237
stimulus property 85
Student Modeling 304
Student Profile 295, 297-298, 304
Summative Oriented (SO) 264
Symbaloo 43, 51
syntax preservation 136-138

T
task effort 236, 248
Task Load Index (TLX) 236, 246
team transition 237-238, 248-249
Technology Acceptance Model (TAM) 212
Temporal-Aural-Visual Representation (TAVR) 98, 101, 108
Test Layout Patterns 137
theoretical reasoning 181
Theory of Planned Behavior (TPB) 212
Theory of Reasoned Action (TRA) 212
Thinking Aloud (TA) 266
Two Dimensional Model of Eysenck (EPQ) 184

U
Unified Modeling Language (UML) 172
Unified Theory of Acceptance and Use of Technology (UTAUT) 212
User-Centred Design (UCD) 264
user-controlled instantiation 136
User eXperience (UX) 263

V
Vierordt’s threshold 290
Visual mental image 99-100, 103-105
Visual Networking Index (VNI) 41
Visual saliency 84-87, 91-93, 97

W
Web browsers 41-42, 51-52, 54
WordNet 177, 179, 187-190, 194, 196-198, 200
word per minute (wpm) 22
Work Analysis Ergonomics (WAE) 240
Workflow Evaluation interface 206-207, 209, 213-214
Workflow Technology Acceptance Model (W-TAM) 212
Working In Questions and Answers (WIQA) 162