Index

A

Access Point (AP) 264
adaptive character wordlength (ACW) 277
additive white Gaussian noise (AWGN) 253, 265
Algorithm for Cluster Establishment (ACE) 242
amplify-and-forward (AF) 250
Analytical Hierarchy Process (AHP) 88
analytic thought 4, 8-10
anticipation 194
Apache Software Foundation (ASF) 283
application programming interface (API) 38, 214, 224
Arabic 184-186, 189-190
ArchStudio 199-200, 209
artefacts 5
aspect-oriented programming (AOP) 175
attribute-value pairs 22-23
augmented reality browser (ARB) 194
author-date-topic (ADT) model 98, 101
author-link-topic (ALT) model 97-99, 101
author search 143
author topic (AT) model 97
automatic exceptions recognition 180
automatic query generation 108
autonomic networking 263, 271, 273

B

Based Station Controlled Dynamic Clustering Protocol (BCDCP) 242
Base Station (BS) 264-265
BibTeX 142-157
binary bit string 132
bit error rate (BER) 249, 254, 257-258
blog 96, 99, 104
blog distillation 96
broker 74-76, 78, 80-90, 92
business process 176
business rules 176

C

cell phones 211, 220
Centralized Low-Energy Adaptive Clustering Hierarchy (LEACH-C) 241
certifier 74-76, 84, 86, 92
CIQ test tool 275-276, 282
classifier 108, 185, 187
cluster 240
cluster-based routing 241
cluster-head 240
cluster network 242
code generation 200, 202
code striping 280, 284
codeword 227-228, 232, 234-235, 251-252, 277, 292
collaboration 9
composite service 75-79, 83, 86, 89
composition history 76, 82-85, 88
compressed index query (CIQ) 276
compressed text indexing 276
computation complexity 235-237
computation-independent model (CIM) 195
concatenated coding scheme 229
concern 178
conjugate operator 251
constraints 77
constructive cost model II (COCOMO II) 192-193
context entity 197
context-oriented component-based application
model-driven architecture (COCA-MDA) 191, 195
contextuality 3, 13
control-flow 53
control loop 271-273
crawl frontier 117, 119-120
cross-layer 269
culture 2
Cumulative Distribution Function (CDF) 266
D

data-centric routing 241
data decoding speed 232
data mining 23, 27, 29, 96, 103-105, 129, 190
decode-and-forward (DF) 250
decoding 230
deduplication 237
deep segmentation 144
deep web 106-120, 123-124, 126, 128-129
Deep Web Crawler 106-108, 110-117, 119, 124,
128-129
Differential Global Positioning System (DGPS) 238
diversity gain 252
diversity-multiplexing tradeoff (DMT) 250
domain modeling 205
domain-specific search 109

E

error correcting code (ECC) 228
Euclidean norm operator 251
Event-Condition-Action (ECA) rule 174
e-world 27
exception handling 181-182
exceptions healing 180
extension relationship 178-179, 181

F

fault tolerance 53, 72, 93, 239-240, 247, 280
feed-forward classifier 186
FireBug 237
fixed relay 251-252, 258, 264
flexibility 175
focused crawler 108-109, 128

G

Generic Autonomic Network Architecture (GANA) 263-264, 269
Global Sensor Network (GSN) 162
golden code 249-262
golden number 250-251
Google Product Search 144

H

Hadoop 283
Hamming code 228, 230, 235, 292
Hamming codes-based data compression (HCDC) 275-276
harvest ratio 125-127

Hermitian operator 251
holistic thought 4, 8, 10
host image 131-139
Human Visual System (HVS) 138
hybrid search 143-144, 156-157

I

individualism 3, 9-10, 13
indoor wayfinding 192, 194, 209
infinite loop 180
information extraction (IE) 23
integer lattice 252
iterated code (IC) 229
iterative self organizing data analysis (ISODATA) 111

J

J48 text classification 184-185, 187-188
Java 25
Java-based wrapper 162-163, 170
JavaScript Object Notation (JSON) 237

K

keyword 143
keywords extractor 186
K-fold cross validation 184, 187
knowledge mediation 11-14, 17

L

Label Value Set (LVS) 110
Latent Dirichlet Allocation (LDA) 97, 101
Latent Semantic Analysis (LSA) 97
Linear Energy Transfer (LET) 233
Line-of-Sight (LOS) propagation 265
Local Area Relay Enhanced Cells 264
localization system 159
location processing component (LPC) 161, 163
lookup speed 280

M

map-based navigation 167, 169-170
MapReduce 283, 293
maximum entropy 185
maximum likelihood (ML) 249-250, 257
mediator 5
merge factor 280
Mica2 sensors 244
middleware 192

323
minimum executing pattern (MEP) 111
Mobile Ad-hoc Network 264
model-to-model transformation 199
multi-concern rules based model 175
Multiple Criteria Decision Making (MCDM) 79
multiple-input multiple-output (MIMO) system 251
multiplexing gain 250, 252
Multi-Point Relay (MPR) 270
MUSIC methodology 192

N
Naïve Bayesian (NB) 184
named entity recognition 24, 104
NetBeans 60-61
Non Line-of-Sight (NLOS) propagation 265
novelty mining 95, 103-105
Nutch crawler 282-283

O
Object Management Group (OMG) 53, 194, 210
ontologies 2, 4-7, 11, 15-18, 20, 29, 35-38, 44-46, 143, 160, 163-164, 171
ontology design 1-2, 15-16
open source software (OSS) 213
OpenStreetMap 212
Operations Support System (OSS) 264
Optimized Link State Routing (OLSR) 269
Orthogonal Frequency Division Multiple Access (OFDMA) 265

P
parity bits 228, 288
peak signal to noise ratio (PSNR) 137
percentage split 184, 187
PlaceLab 159
platform-independent model (PIM) 193
polychronic 3
positioning error 165-166
power consumption 239-242, 244, 246-247
Power Efficient Cluster Algorithm (PECA) 239, 242
Power Efficient Gathering in Sensor Information Systems (PEGASIS) 241
preprocessing 29, 185-186, 190
Probabilistic Latent Semantic Analysis (PLSA) 97
Publish-Find-Bind model 31, 44

Q
QoS-aware specification functions (QASF) 55
quadrature amplitude modulation (QAM) constellation 252
quadrature phase-shift keying (QPSK) 258
quality of service (QoS) 48-49, 74, 193, 250, 264
query intensive interface information extraction protocol (QIIIEP) 107, 117-119
QuizRDF 144, 156

R
received signal vector 254
redundancy minimization 232
reinforcement learning 111, 129
Relay Nodes (RN) 264
relay selection 250
requirements reflection 209
resource-consuming component (RCC) 55
resource description framework (RDF) 143
restraint rules 182
Rhetorical Structure Theory (RST) 12
Ruby on Rails 182

S
scaling 80, 82
Self-Organizing Sensor (SOS) algorithm 242
self-recovering 194
self-tuning 194
semantic search 26, 142-144, 147, 156-157
semantic web 1, 17-20, 22, 24-31, 33-35, 37, 44-47, 72, 142-144, 152, 156-157
sensing model 160
separation of concerns 30, 174-176, 191, 208
sequential minimal optimization (SMO) 184-185
service class 85
Service-Oriented Architecture (SOA) 49, 75, 174
shrink and search engine (SASE) 277
signal-to-noise ratio (SNR) 251
Simple Additive Weighting (SAW) 80, 87
Simple Object Access Protocol (SOAP) 31
smart phone 167, 169, 215, 219, 222, 225, 272
social media mining 95-97, 103
soft error rate (SER) 228
soft memory error 228
software understanding (SU) 202
space model 160
space-time (ST) coding 251
spam blog (splog) 96
SPARQL 143-157
sphere decoding (SD) 249, 254
stemming 281
stop words 184-186, 188, 190
support vector machine (SMO) 185
syntax 32-33, 35, 52, 79, 143, 145, 156, 164, 182, 199
Index

T

technological mediation 5, 7, 16, 18

text normalization 98, 281

thousands of lines of code (KLOC) 201

time division duplex (TDD) 266

tokenization 280

transmission radius 245-246

twitter 212-213, 225

U

Ubisense 159, 161, 166, 168

uncertainty avoidance 3, 5, 8-10, 13, 15

uncertainty awareness 166

Unified Modeling Language (UML) 49

unity 252, 258

Universal Description, Discovery and Integration (UDDI) 31

utility function 76, 193, 206

V

Virtual Antenna Arrays (VAA) 264

Virtual Compass 159, 161, 171

virtual sensor 162-164

volunteered geographic information (VGI) 212

W

Wakaito Environment for Knowledge Acquisition (WEKA) 187

watermarking 130-133, 139-140, 237

extraction 132

invisibility 130, 132-133, 137-139

robustness 133


Web Ontology Language (OWL) 164

web process 72, 76-77, 79-84, 86-88, 90

Web search engine 26, 275-282, 284, 288, 291-292

Web Service Composition and Execution (WSCE) 74-75, 92

Web Service Modeling eXecution (WSMX) 30

Web Service Modeling Language (WSML) 35

Web Service Modeling Ontology (WSMO) 30, 46

Web Services Description Language (WSDL) 31

Web spider 278

Web to Peer (W2P) 161

weighting 80, 82

white-box 201

WikiCrimes 212, 225

wireless sensor network (WSN) 240

Z

Zero-Forcing (ZF) detection 254