

INDEX

- Actor filter, 163, 189
- Actors, in SNA, 70
- Actor scatter plot, 133, 167, 179
- Adjusted R Square, 249, 250, 258, 259
- Agreeability, 250, 259–260
- “Allteams-cleaned”, 200
- Amity University, India, 297–298, 300, 311, 312, 316–317, 322
- Annotate functions, 164, 243
- ANOVA results
 - by ethnicity for FFI characteristics, 256
 - by gender for FFI characteristics, 255
 - by nationality for FFI characteristics, 257
- Anti-gaming, 66
- Anti-vaccination, 447
- Antivaxxers identification through machine learning, 447–457
- Asteroid belt, 160, 183
- Automatic Media Insights COIN Assessment (AMICA), 4, 13, 17, 385–389
- Average Response Time (ART), 154, 345, 346, 403
- Balanced contribution, 49–50, 52
- BeingExample, 334
- Bernie Sander’s presidential campaign, 352, 353–355
- Betweenness centrality, 70, 72–73, 188, 306, 308
- Betweenness curves, 178
- Bidirectional links, 150, 312–313, 315
- Bipartite graphs
 - measuring the importance of brands through betweenness of actors in, 136–137
- Black swans, 108
- Blogs, 3, 298–311
- Bowling for fascism, 90–91
- Brands, calculating the importance of, 305
- “Brothers”, 333
- Bush, Jeb, 356, 360, 361, 363, 364
- “Calculate Sentiment” function, 164, 167, 172, 200, 243, 273, 283, 317, 402
- Calendar data, 2
- Centrality annotations, 137, 162, 164, 173, 196, 200, 243, 273, 283, 314, 402
- Chat, 3, 4
- Chauhan, Ashok, 297, 298, 309

- Cincinnati Children's
 - Hospital Medical Center (CCHMC), 400
- Classic SNA, 28
- Clinton, Hillary, 137, 151, 219–228, 350, 356, 365
- Clustered network, 89–90
- COIN project, 184
- COINonCOINs community, 189–190
- Collaboration
 - honest signals of, 45
 - balanced contribution, 49–50
 - honest language, 50–51
 - responsiveness, 50
 - rotating leadership, 49
 - shared context, 51–55
 - strong leadership, 48
 - knowledge flow
 - optimization, 58–61
 - privacy concerns, dealing with, 56–58
 - virtual mirroring, 56
- Collaborative Innovation
 - Networks (COINs), 6, 24, 25, 192, 212, 352, 353–354, 386
- Collaborative Learning
 - Network (CLN) learning, 354
- Collaborative performance of
 - organizations, measuring, 419
- Communication galaxies, understanding, 67
- Community detection, finding
 - COINs through, 185–192
- Community detection
 - algorithm, 185, 186, 187, 188
- Condor, 108, 109, 155, 156, 157, 165, 170, 172, 185, 197, 208, 212, 229, 242, 296, 340, 366, 419
 - analyzing e-mail with, 108
 - bipartite graphs, brands through
 - betweenness of actors in, 136–137
- Coolhunting on Internet
 - with, 11–12
- drilling down in, 394
- facebook wall with,
 - analyzing, 126–129
- four-step analysis process. *See* Four-step analysis process
- getting started with, 121
- Google CSE, degree-of-separation search
 - with, 141–146
- graph, 137
- identifying criminals
 - through machine learning in, 280–290
- main parts of, 113
- manual, 122
- sample four-step analysis
 - with twitter, 130
 - export, 134
 - fetch data, 130–132
 - process, 132
 - visualize, 133–134
- started with, 9–10
- Twitter, degree-of-separation search
 - with, 146–150

- Wikipedia search, 150–152
- Condor Export Wizards, 118, 119
- Condor software tool, 3, 28, 57
- Conscientiousness, 103, 244, 253–254, 258
- Contribution index, 49, 70, 74, 75, 154, 204, 215
- Contribution index
 - annotations, 164, 166, 200, 243, 273, 283
- Contribution index scatter plot, 225
- Convicts versus nonconvicts, 287
- Coolfarming, 3, 4, 6, 9, 12, 24, 107, 108
 - data collection and analysis process, 31–32
 - organizations, 25
 - through knowledge flow optimization, 58–61
- Coolhunting, 3, 4, 24, 36, 107, 108, 349
 - finding trends by finding trendsetter, 39–44
- Francogeddon, 12, 339–348
 - on Internet with Condor, 11–12
 - on social media, 40
 - and trend forecasting on web, 7, 37
 - US Presidential elections, 12
- Coolhunting on the Internet with Condor, 295
 - analysis of the crowd, 322–334
 - expert analysis, 298–311
 - swarm analysis, 311–321
- Cooperation, evolution of, 93
- Cooperation and
 - trustworthiness, uncalculating, 94–95
- Correlation, 78–80, 81
- Correlation results of FFI
 - metrics with six honest signal SNA metrics, 245–248
- Correlations calculation
 - between FFI and e-mail, 242–244
- “Create new dataset”, 182
- Creativity, 65–66
- Criminal actors, identifying
 - through their honest signals of collaboration, 273–280
- Criminals, identifying
 - through machine learning in condor, 280–290
- Crowd, 296
 - analysis of, 322–334
- CSV data, 220
- Deceptive opinion spam, finding, 96–97
- Degree centrality, 70, 72, 73, 137, 181
- Demographic information
 - calculating, 99–103
 - extracting, 85, 86
- Density, 70, 74, 186
- Directed graph, 71

- Edges, 70
- EgoFetcher, 414–416
- Ego networks, 25, 192
- Election outcome, predicting, 103
- Electronic communications, 3, 28
- E-mail, 2, 25, 65, 115, 242, 393
 - analyzing with, 10
 - calculating personality characteristics from, 11, 109
 - predicting criminal intent from, 11, 109
 - see also* Personality characteristics calculation from e-mail
- E-mail analysis with condor, 153
 - creating a virtual mirror of an organization, 192–219
 - creating virtual mirror of personal e-mailbox, 154
 - drawing the term graph, 172–174
 - removing the mailbox owner, 174–185
 - finding COINs through community detection, 185–191
- Hillary Clinton’s mail, analyzing, 219–228
 - organizational aspects of e-mail-based SNA, 228–231
- E-mail-based social network analysis, 64–65
- Emails.csv, 220
- Enron e-mail archive, 11, 109, 263
 - exploratory analysis, 264–272
 - identifying criminal actors through their honest signals of collaboration, 273–280
 - “tribefinder”, 280–290
- Exchange Autodiscover server, 157
- Expert analysis, 298–311
- Experts, 296
- Exporters, 113, 118–120
- Extroversion, 250, 258–259
- Facebook, 3, 25, 112, 115, 425
 - spreading ideas on, 95–96
- Facebook wall, analyzing, 126–129
- Face-to-face communication, 3, 30, 38
- FeelTheBern.com, 352
- Fetch content, 157
- Fetchers, 111, 112, 113, 115–116
 - “Fetch Web”, 299
- Filters, 112, 113, 116
- Financial capital, improving through optimizing social capital, 65–67
- Financial performance, measuring, 97–99
- Four-step analysis process, 111
 - social media, 111
 - exporters, 118–120
 - fetchers, 115–116
 - filters, 116

- visualizers, 116–118
- Francogeddon, 339–348
- Gates, Bill, 408, 409–410
- Geotagging, 296
- Gephi, generating graph
 - pictures with, 15, 459–464
- GMAIL login dialog, 158, 159
- GMAIL mailbox, 194
- Google, 43, 93, 297, 425, 427
- Google Custom Search, 115
- Google Custom Search Engine (CSE), 136
 - degree-of-separation search with, 141–146
- Google Trends, 97, 350
- Graph, 28, 137–140
- Grexit, 342
- Group betweenness
 - centrality, 70, 74, 118, 345
- Group degree centrality, 70, 73
- Happiness paradox, 101
- Hawthorne effect, 56
- Hillary Clinton’s mail,
 - analyzing, 219–228
- Homophily, evolution of, 94
- Honest language, 50–51, 53, 61
- Huffington, Arianna, 408
- Huffington Post, 352
- IIT, 298, 320–321
- IMAP account, 158
- “Import local data first”, 212
- Infant Mortality reduction
 - Collaboration Improvement and Innovation Networks (IM CoIIN), 189, 400
- Inside media individual collaboration
 - (IMIC), 13, 391–403
 - annotation process, 401–403
- Inside media organizational collaboration
 - (IMOC), 14, 419–423
 - annotation process, 423
- Internet, 38, 92–93, 264, 295–334
- Kaggle website, 220
- KNIME, 447–458
 - environment, 8
 - identifying anti-vaxxers through machine learning using, 15
- Knowledge flow
 - optimization, 58–61
 - analyze, 59
 - coolfarming, 58
 - mirror, 60–61
 - optimize, 61
 - through organizational social network analysis, 29–31
 - predict, 59
- Known unknowns, 107–108
- Krugman, Paul, 408
- Libertea2012, 352
- Linear regression, 80, 82–83

- “Load actor merge CSV”, 198
- Louvain algorithm, 185–186
- Machine learning, 447–458
 - finding fake reviews through, 96–97
- Mailbox owner, removing, 174–185
- Mann-Whitney U-test, 345
- “Manual node merging” wizard, 161, 186
- Matlab, 120
- Microsoft, 427
- MIT, 46, 298, 320–321
- MSFTExchange, 427
- MySQL, 115, 122, 124, 155, 156, 326, 461
- Natural language processing (NLP), 212
- Neo-FFI test, 242
- Neuroticism, 103, 244, 249
- Nick_Ksg, 334
- “Node labels”, 307
- Nodes, 70
- “Nonconvicts”, 287
- Nudges, 50, 345
- One-semester course, 18
- Online calendars, 115, 400
- Online social media, 3, 349, 354
- Online social network
 - demographic information, calculating, 99–103
 - election outcome, predicting, 103
 - facebook, spreading ideas on, 95–96
 - financial performance, measuring, 97–99
 - ideas spread in, 8, 85
 - machine learning, finding fake reviews through, 96–97
 - papers covered in section, overview, 86–88
 - social selection and peer influence in, 95
 - theories of information diffusion, 89–94
- Openness, 250
- Organizational networks, 25
- Organizational trust and satisfaction, measuring, 66
- Organization’s
 - Communications Patterns assessment, 32–33
- Oscillation annotations, 164, 165, 200, 243, 273, 283
- Outside Media Individual
 - Collaboration (OMIC), 13–14, 405–417
 - annotation process, 414–417
- Outside Media
 - Organizational Collaboration (OMOC), 14, 425
 - annotation process, 429
- Pearson correlation, 78–80, 81
- Performance metrics
 - correlating communication patterns against, 34

- Personal e-mailbox analysis, 154
 - creating virtual mirror of personal e-mailbox, 154
 - drawing the term graph, 172–185
 - removing the mailbox owner, 174–185
- Personality and word use among bloggers, 102–103
- Personality characteristics
 - calculation from e-mail, 241
 - adding gender, ethnicity, and nationality as control variables, 254–260
 - agreeability, 259–260
 - extroversion, 258–259
 - calculating correlations between FFI and e-mail, 242–244
 - general prediction formula, developing, 244
 - agreeability, 250
 - conscientiousness, 253–254
 - extroversion, 250
 - neuroticism, 244
 - openness, 250
- Persons.csv file, 220
- Privacy concerns, dealing with, 56–58
- Problem, 170
- Process Dataset, 154
- Pro-vaxxers, 448
- R, statistical package, 120
- Receiver operating characteristics (ROC) curve, 288
- Reddit, 352, 353
- Regression, 80, 82–83
- Regression coefficients for
 - regressing six honest signals
 - against agreeability, 260
 - against agreeability with ethnicity as control variable, 260
 - against conscientiousness, 253–254
 - against extraversion, 251
 - against extraversion with ethnicity as control variable, 259
 - against neuroticism, 249
 - against openness, 252
 - “Remove specific actor” function, 175, 188
- Responsiveness, 50, 52
- RFSchatten, 352
- Rotating leadership, 49, 52
- Sales effectiveness of a global high-tech company, 63
- Sample course syllabus, 20–23
- Sample download, 444
- Sample mid-term exam, 465–468
- Sanders, Bernie, 365, 369–376
- Script-generated actors, 197
- Shantrjosh, 427
- Shared context, 51, 53, 54–55
- SIC & SOC (Survey of Individual and Organizational Collaboration), 14

- Six honest signals of collaboration, 7
- 6670G, 334
- Skype, 2, 115, 393
- Slander, 427
- SMOTE, 373, 378
- “Snowball sampling”, 230
- Social capital on Facebook, 96
- Social fMRI, 102
- Social media, 30
 - Coolhunting on, 40
 - exporters, 118–120
 - fetchers, 115–116
 - filters, 116
 - fundamental analysis, 108
 - as quantitative indicator of political behavior, 103
 - visualizers, 116–118
- Social network analysis (SNA), 5–6, 28
 - basics of, 70
 - E-mail-based, 64–65
 - knowledge flow
 - optimization through, 29–31
 - and statistics, 8, 69
- Social network picture of COINs seminar network, 47
- Social networks, 5, 90
 - and cooperation in hunter-gatherers, 91–92
 - influential and susceptible members of, 95–96
 - trend prediction by
 - analyzing, 6
 - trend prediction by measuring, 24
- Social Quantum Physics, principles of, 16
- Spammers, 66
- SPSS statistical package, 114, 120
- SPSS’ *t*-test, 274, 276
- SQLite database, 220
- Stata, 120
- Statistical techniques, 8
- Statistics
 - basics of, 75
 - linear regression, 80, 82–83
 - Pearson correlation, 78–80, 81
 - and SNA, 75
 - t*-test, 76, 78
- Stock market
 - Twitter mood predicts, 98
 - Wikipedia usage patterns, 98–99
- Strong leadership, 48, 54
- Strong ties, 89
- Survey of individual collaboration (SIC), 431–438
 - empathy/listening, 438
 - fairness, 435
 - forgiveness, 437
 - organizational motivation, 433
 - transparency, 434
 - trust/honesty, 436
- Survey of organizational collaboration (SOC), 431, 439–443
 - collective consciousness, 440
 - contribution/sharing, 442
 - leadership, 441
 - responsiveness/respect, 443
- Swarm analysis, 296, 311–321
- Swiss Franc, 340, 342

- Swiss National Bank, 340
- Synthetic Minority Over-sampling Technique (SMOTE)
 - algorithm, 285, 287
- Tag cloud, creating, 223
- Temporal social surface, 208
- “Term graph” function, 172
- “Terms”, 172
- Theories of information diffusion, 89–94
- Ties, 70
- Trend forecasting, 107, 108
- Trends finding by finding trendsetter, 39–43
- “Tribefinder”, 280–290, 350, 366–382
- Trump, Donald, 350, 365–368, 377–381
- t*-test, 76, 78, 274, 276
- Turntaking annotations, 164, 166, 200, 243, 273, 283
- Twitter, 2, 3, 25, 101, 112, 115, 136, 146–150, 296, 322–334, 425, 427
 - EgoFetcher, 414–416
 - Tribefinder, 382
- 2015/2016 Bernie Sanders campaign, 349
- 2016 US Presidential elections, 350
 - Bernie Sander’s presidential campaign, 353–355
 - Coolhunting Bernie Sanders, Hillary Clinton, Jeb Bush, and Donald Trump, 356–366
 - tribefinder on twitter, 366–382
- Undirected network, 70
- Unidirectional links, 313
- Unknown unknowns, 108
- Videoconferencing, 3
- Virtual collaboration projects, 193
- Virtual mirror creation of an organization, 192–219
- Virtual mirroring, 32, 34–36, 56, 107, 108
- Virtual tribes, 366, 368–369
- Visualizers, 113, 116, 118
- Weak ties, 89
- Web, 295
- Websites and blogs, 298–311
- Wiki Evolution Fetcher, 311, 318
- Wikipedia, 2, 3, 42, 93, 112, 115, 136, 150–152, 311–321, 425
 - controversial topics in, 99–100
 - “With history” option, 177, 207
- Word Cloud, 154