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{'Analytics': ['Audio Mining/Speech Analytics',
               'Info Extraction/Text Mining',
               'Social Network Analysis',
               'Prediction Markets',
               'Content Analytics',
               'Predictive Analytics',
               'Social Analytics',
               'Big Data',
               'Video Analytics for Customer Serv.',
               'In-Memory Analytics',
               'Prescriptive Analytics',
               'Personal Analytics',
               'Data Science',
               'Advanced Self-Service Analytics',
               'Data Broker PaaS',
               'Graph Analytics',
               'Edge Analytics'],
 'Artificial Intelligence': ['Knowledge-based Systems',
                             'Networked Collective Intelligence',
                             'Image/Content Recognition',
                             'Machine Learning',
                             'Cognitive Expert Advisors',
                             'General AI',
                             'Cognitive Computing',
                             'Deep Neural Nets (Deep Learning)',
                             'Artificial General Intelligence',
                             'Deep Neural Network ASICs',
                             'AI Paas',
                             'Edge AI',
                             'Explainable AI',
                             'Emotion AI',
                             'Transfer Learning',
                             'Adaptive Machine Learning',
                             'Generative Adversarial Networks'],
 'Communications': ['Video Conferencing',
                    'Desktop Videoconferencing',
                    'Desktop Computer-Telephony Integration',
                    'Voice over IP',
                    'Enterprise Chat',
                    'MMS (multimedia text)',
                    'Instant Messaging',
                    'Corporate Blogging',
                    'P2P VoIP',
                    'Podcasting',
                    'Video Telepresence',
                    'Microblogging',
                    'Consumer Generated Media'],
 'Computer Architecture': ['Grid Computing/Public MPP Clusters',
                           'Ubiquitous Computing',
                           'Quantum Computing',
                           'Nanocomputing/Molecular Transistors',
                           'Holographic storage',
                           'Internal MPP Grids',
                           'DNA Logic',
                           'Tera-architectures',
                           'Solid State Drives',
                           'Cloud Computing',
                           'Surface Computers',
                           'Private Cloud Computing',
                           'Machine-Machine Comm. Serv.',
                           'Hybrid Cloud Computing',
                           'Micro Data Centers',
                           'Neuromorphic Hardware',
                           'Edge Computing',
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                              'Self Healing System Technology',
                              'Next-Generation Memory'],
'Cyber Security': ['Smartcards',
                   'Biometric Authentication',
                   'Digital Signatures/PKI',
                   'Identity Services (Public)',
                   'Trusted Computing Platforms',
                   'Truth Verification',
                   'Biometric Identity Docs',
                   'Digital Security',
                   'Software Defined Security',
                   'Blockchain',
                   'Blockchain for Data Security'],
'Display Technology': ['Electronic Ink/Digital Paper',
                       'Head-Mounted Displays',
                       'OLED/Light Emitting Polymers',
                       '3D Flat Panel Displays',
                       'Volumetric & Holographic Displays'],
'Energy Technology': ['Micro Fuel Cells',
                      'Green IT',
                      'Wireless Power',
                      'Silicon Anode Batteries'],
'Financial Technology': ['Micro/E-Payments',
                         'B2C E-Commerce',
                         'B2B E-Markets',
                         'XBRL',
                         'Mobile App Stores',
                         'Application Stores',
                         'Cryptocurrencies',
                         'Cryptocurrency Exchanges'],
'Human-Computer Interface': ['Speech Recognition (Cloud)',
                             'Handwriting Recognition',
                             'Virtual Reality',
                             'Intelligent Agents',
                             'VRML/Avatars',
                             'Wearable Computers',
                             'Synthetic Characters/Chatbots',
                             'Voice Portals',
                             'Text-to-Speech/Speech Synthesis',
                             'Speech Recognition (Desktop)',
                             'NLP Query/Interfaces',
                             'Speech Recognition (Mobile)',
                             'Augmented Reality',
                             'Computer/Brain Interfaces',
                             'Speech-to-Speech Translation',
                             'Gesture Recognition/Control',
                             'Portable Personality',
                             'Ambient/Glanceable Displays',
                             'Virtual Assistants',
                             'Video Search',
                             'Human Augmentation',
                             'Tangible User Interfaces',
                             'Wearable UI',
                             'Affective Computing',
                             'Electrovibration',
                             'Smart Advisors',
                             'People-Literate Technology',
                             'Smart Data Discovery',
                             'Conversational User Interfaces',
                             'Mixed Reality',
                             'Conversational AI Platform',
                             'Knowledge Graphs',
                             'Personification',
                             'Immersive Workspaces'],
'Information Technology': ['Database Mining',
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                             'Enterprise Portals',
                             'Text Mining',
                             'Hosted Virtual Desktops',
                             'ASP/SaaS',
                             'WAP/Wireless Web',
                             'Desktop Search',
                             'Erasable Paper Printing Systems',
                             'BYOD'],
'Manufacturing': ['Inkjet Manufacturing/3D Printing',
                  'Carbon Nanotubes',
                  '3D Bioprinting',
                  'Consumer 3D Printing',
                  'Nanotube Electronics',
                  '4D Printing',
                  'Biotech-Artificial Tissue',
                  'Nanoscale 3D Printing'],
'Methodology': ['Object-oriented Programming',
                'Imaging',
                'Workflow',
                'Knowledge Management',
                'WS-Enabled Business Models',
                'Unified Communications',
                'Model-driven Architectures',
                'Business Process Platforms',
                'Folksonomies',
                'Event Driven Architecture',
                'Idea Management',
                'Expertise Location & Management',
                'Behavioral Economics',
                'Context Delivery Services',
                'Consumerization',
                'Group Buying',
                'Gamification',
                'Crowdsourcing',
                'Neurobusiness',
                'Software Defined Anything',
                'Digital Dexterity',
                'Citizen Data Science',
                'Ent Taxonomy/Ontology Mgt',
                'Augmented Data Discovery',
                'Digital Twins',
                'Serverless PaaS',
                'Augmented Intelligence',
                'Decentralized Autonomous Org',
                'Digital Ops'],
'Mobile Technology': ['Wireless Communications',
                      'Smartphones/PDA Phones',
                      'Location Aware Technology',
                      'Tablet PCs',
                      'Location-Aware Apps',
                      'ebook readers',
                      'Media Tablets'],
'Networking Technology': ['Information Superhighway',
                          'Internet Terminals',
                          'Intranets',
                          'Cable Modems',
                          'Network Computers',
                          'Extranets',
                          'xDSL/Cable Modems',
                          'Jini',
                          'Peer to Peer',
                          'VPNs',
                          'Bluetooth Networking',
                          '4G Networks',
                          'IP v6',
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                              'Broadband over Power Lines',
                              '5G Networks',
                              'Low-Earth-Orbit Satellite Systems'],
'Physical Actuation': ['MEMS',
                       'Mobile Robots/Smart Robots',
                       'Autonomous Mobile Robots'],
'Platforms': ['Interactive TV',
              'Java',
              'DVD',
              'Java - the Platform',
              'Streaming Media over Web',
              'On-line Communities',
              'Desktop Linux for Business',
              'Virtual Worlds/Environments',
              'IP Video/Internet Video',
              'Internet TV',
              'Internet of Things ',
              'Social TV',
              'Connected Home',
              'Smart Workspace',
              'IOT Platforms',
              'AR Cloud'],
'Sensing/Tracking': ['E-Tags/Passive RFID',
                     'Mesh Networks - Sensors/WA',
                     'Smart Dust',
                     'RFID (case/pallet)',
                     'RFID (Item)',
                     'Home Health Monitoring',
                     'Terahertz Waves',
                     '3D Scanners',
                     'Mobile Health Monitoring',
                     'Biochips',
                     'Bioacoustic Sensing',
                     '3D Sensing Cameras'],
'Software Architecture': ['Emergent Computation',
                          'Application Sharing',
                          'Service Oriented Architecture',
                          'Business Rule Engines',
                          'BPM Suites',
                          'Corporate Semantic Web',
                          'Social Computing Platforms',
                          'Extreme Transaction Processing',
                          'In Memory DBMS',
                          'Complex-Event Processing',
                          'Synthetic Data'],
'Vehicle Technology': ['Autonomous Vehicles',
                       'Consumer Telematics',
                       'Autonomous Field Vehicles',
                       'Commercial UAVs (Drones)',
                       'Autonomous Driving Level 4',
                       'Autonomous Driving Level 5',
                       'Flying Autonomous Vehicle',
                       'Light Cargo Delivery Drones'],
'Web Technology': ['World Wide Web',
                   'Netcasting/Push Technology',
                   'Intranet Publishing',
                   'XML',
                   '3D Web',
                   'Web Services',
                   'Semantic Web',
                   'RSS (Really Simple Syndication)',
                   'Wikis',
                   'AJAX',
                   'Web 2.0',
                   'Mashups',
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                        'RSS Enterprise',
                        'Offline AJAX',
                        'Web Platforms',
                        'Service Oriented Business Apps',
                        'Activity streams',
                        'QR/Color Code',
                        'HTML5',
                        'Decentralized Web'],
'Wireless Technology': ['Bluetooth',
                        'WiFi (802.11a)',
                        'Bluetooth Cable Replacement',
                        '802.11g',
                        'Ultrawideband/WiMedia',
                        '802.15.4/Zigby',
                        '802.16 WiMAX',
                        'NFC',
                        '802.11ax']}
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