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General and reference

Document types
- Surveys and overviews
- Reference works
- General conference proceedings
- Biographies
- General literature
- Computing standards, RFCs and guidelines

Cross-computing tools and techniques
- Reliability
- Empirical studies
- Measurement
- Metrics
- Evaluation
- Experimentation
- Estimation
- Design
- Performance
- Validation
- Verification

Hardware

Printed circuit boards
- Electromagnetic interference and compatibility
- PCB design and layout

Communication hardware, interfaces and storage
- Signal processing systems
  - Digital signal processing
  - Beamforming
  - Noise reduction
- Sensors and actuators
- Buses and high-speed links
- Displays and imagers
- External storage
- Networking hardware
- Printers
- Sensor applications and deployments
- Sensor devices and platforms
- Sound-based input / output
- Tactile and hand-based interfaces
  - Touch screens
  - Haptic devices
- Scanners
Wireless devices
Wireless integrated network sensors
Electro-mechanical devices

Integrated circuits
3D integrated circuits
Interconnect
Input / output circuits
Metallic interconnect
Photonic and optical interconnect
Radio frequency and wireless interconnect

Semiconductor memory
Dynamic memory
Static memory
Non-volatile memory
Read-only memory

Digital switches
Transistors
Logic families

Logic circuits
Arithmetic and datapath circuits
Asynchronous circuits
Combinational circuits
Design modules and hierarchy
Finite state machines
Sequential circuits

Reconfigurable logic and FPGAs
Hardware accelerators
High-speed input / output
Programmable logic elements
Programmable interconnect
Reconfigurable logic applications

Very large scale integration design
3D integrated circuits
Analog and mixed-signal circuits
Data conversion
Clock generation and timing
Analog and mixed-signal circuit optimization
Radio frequency and wireless circuits
Wireline communication
Analog and mixed-signal circuit synthesis

Application-specific VLSI designs
Application specific integrated circuits
Application specific instruction set processors
Application specific processors

Design reuse and communication-based design
Network on chip
System on a chip
Platform-based design
Hard and soft IP
Design rules
Economics of chip design and manufacturing
Full-custom circuits
VLSI design manufacturing considerations
On-chip resource management
On-chip sensors
Standard cell libraries
VLSI packaging
  Die and wafer stacking
  Input / output styles
  Multi-chip modules
  Package-level interconnect
VLSI system specification and constraints
Power and energy
  Thermal issues
    Temperature monitoring
    Temperature simulation and estimation
    Temperature control
    Temperature optimization
Energy generation and storage
  Batteries
  Fuel-based energy
  Renewable energy
  Reusable energy storage
Energy distribution
  Energy metering
  Power conversion
  Power networks
  Smart grid
Impact on the environment
Power estimation and optimization
  Switching devices power issues
  Interconnect power issues
  Circuits power issues
  Chip-level power issues
  Platform power issues
  Enterprise level and data centers power issues
Electronic design automation
  High-level and register-transfer level synthesis
    Datapath optimization
    Hardware-software codesign
    Resource binding and sharing
    Operations scheduling
Hardware description languages and compilation
Logic synthesis
  Combinational synthesis
  Circuit optimization
Sequential synthesis
Technology-mapping
Transistor-level synthesis
Modeling and parameter extraction
Physical design (EDA)
  Clock-network synthesis
  Packaging
  Partitioning and floorplanning
  Placement
  Physical synthesis
  Power grid design
  Wire routing
Timing analysis
  Electrical-level simulation
  Model-order reduction
  Compact delay models
  Static timing analysis
  Statistical timing analysis
  Transition-based timing analysis
Methodologies for EDA
  Best practices for EDA
  Design databases for EDA
  Software tools for EDA
Hardware validation
  Functional verification
    Model checking
    Coverage metrics
    Equivalence checking
    Semi-formal verification
    Simulation and emulation
    Transaction-level verification
    Theorem proving and SAT solving
    Assertion checking
Physical verification
  Design rule checking
  Layout-versus-schematics
  Power and thermal analysis
  Timing analysis and sign-off
Post-manufacture validation and debug
  Bug detection, localization and diagnosis
  Bug fixing (hardware)
  Design for debug
Hardware test
  Analog, mixed-signal and radio frequency test
  Board- and system-level test
  Defect-based test
  Design for testability
    Built-in self-test
Online test and diagnostics
Test data compression
Fault models and test metrics
Memory test and repair
Hardware reliability screening
Test-pattern generation and fault simulation
Testing with distributed and parallel systems

Robustness
Fault tolerance
Error detection and error correction
Failure prediction
Failure recovery, maintenance and self-repair
Redundancy
Self-checking mechanisms
System-level fault tolerance

Design for manufacturability
Process variations
Yield and cost modeling
Yield and cost optimization

Hardware reliability
Aging of circuits and systems
Circuit hardening
Early-life failures and infant mortality
Process, voltage and temperature variations
Signal integrity and noise analysis
Transient errors and upsets

Safety critical systems

Emerging technologies
Analysis and design of emerging devices and systems
Emerging architectures
Emerging languages and compilers
Emerging simulation
Emerging tools and methodologies

Biology-related information processing
Bio-embedded electronics
Neural systems

Circuit substrates
III-V compounds
Carbon based electronics
Cellular neural networks
Flexible and printable circuits
Superconducting circuits

Electromechanical systems
Microelectromechanical systems
Nanoelectromechanical systems

Emerging interfaces
Memory and dense storage
Emerging optical and photonic technologies
Reversible logic
Plasmonics
Quantum technologies
  Single electron devices
  Tunneling devices
  Quantum computation
    Quantum communication and cryptography
    Quantum error correction and fault tolerance
  Quantum dots and cellular automata
Spintronics and magnetic technologies

Computer systems organization

Architectures

Serial architectures
  Reduced instruction set computing
  Complex instruction set computing
  Superscalar architectures
  Pipeline computing
  Stack machines

Parallel architectures
  Very long instruction word
  Interconnection architectures
  Multiple instruction, multiple data
  Cellular architectures
  Multiple instruction, single data
  Single instruction, multiple data
  Systolic arrays
  Multicore architectures

Distributed architectures
  Cloud computing
  Client-server architectures
  n-tier architectures
  Peer-to-peer architectures
  Grid computing

Other architectures
  Neural networks
  Reconfigurable computing
  Analog computers
  Data flow architectures
  Heterogeneous (hybrid) systems
  Self-organizing autonomic computing
  Optical computing
  Quantum computing
  Molecular computing
  High-level language architectures
  Special purpose systems
Embedded and cyber-physical systems
   Sensor networks
   Robotics
      Robotic components
      Robotic control
      Robotic autonomy
      External interfaces for robotics
   Sensors and actuators
   System on a chip
Embedded systems
   Firmware
   Embedded hardware
   Embedded software
Real-time systems
   Real-time operating systems
   Real-time languages
   Real-time system specification
   Real-time system architecture
Dependable and fault-tolerant systems and networks
   Reliability
   Availability
   Maintainability and maintenance
   Processors and memory architectures
   Secondary storage organization
   Redundancy
   Fault-tolerant network topologies

Networks

Network architectures
   Network design principles
      Layering
      Naming and addressing
      Programming interfaces
Network protocols
   Network protocol design
   Protocol correctness
      Protocol testing and verification
      Formal specifications
   Link-layer protocols
   Network layer protocols
      Routing protocols
      Signaling protocols
   Transport protocols
   Session protocols
   Presentation protocols
   Application layer protocols
Peer-to-peer protocols
OAM protocols
  Time synchronization protocols
  Network policy
Cross-layer protocols
Network File System (NFS) protocol
Network components
  Intermediate nodes
    Routers
    Bridges and switches
  Physical links
    Repeaters
  Middle boxes / network appliances
End nodes
  Network adapters
  Network servers
Wireless access points, base stations and infrastructure
  Cognitive radios
Logical nodes
  Network domains
Network algorithms
  Data path algorithms
    Packet classification
    Deep packet inspection
    Packet scheduling
  Control path algorithms
    Network resources allocation
    Network control algorithms
    Traffic engineering algorithms
    Network design and planning algorithms
Network economics
Network performance evaluation
  Network performance modeling
  Network simulations
  Network experimentation
  Network performance analysis
  Network measurement
Network properties
  Network security
    Security protocols
    Web protocol security
    Mobile and wireless security
    Denial-of-service attacks
    Firewalls
Network range
  Short-range networks
  Local area networks
  Metropolitan area networks
Wide area networks
Very long-range networks

Network structure
- Topology analysis and generation
- Physical topologies
- Logical / virtual topologies

Network topology types
- Point-to-point networks
- Bus networks
- Star networks
- Ring networks
  - Token ring networks
  - Fiber distributed data interface (FDDI)
- Mesh networks
  - Wireless mesh networks
- Hybrid networks

Network dynamics
Network reliability
- Error detection and error correction

Network mobility
Network manageability
Network privacy and anonymity

Network services
- Naming and addressing
- Cloud computing
- Location based services
- Programmable networks
- In-network processing
- Network management
- Network monitoring

Network types
- Network on chip
- Home networks
- Storage area networks
- Data center networks
- Wired access networks
- Cyber-physical networks
  - Sensor networks
- Mobile networks
- Overlay and other logical network structures
  - Peer-to-peer networks
  - World Wide Web (network structure)
  - Social media networks
  - Online social networks
- Wireless access networks
  - Wireless local area networks
  - Wireless personal area networks
- Ad hoc networks
Mobile ad hoc networks
Public Internet
Packet-switching networks

Software and its engineering

Software organization and properties
Contextual software domains
  E-commerce infrastructure
Software infrastructure
  Interpreters
  Middleware
    Message oriented middleware
    Reflective middleware
    Embedded middleware
  Virtual machines
Operating systems
  File systems management
Memory management
  Virtual memory
  Main memory
  Allocation / deallocation strategies
  Garbage collection
  Distributed memory
  Secondary storage
Process management
  Scheduling
  Deadlocks
  Multithreading
  Multiprocessing / multiprogramming / multitasking
  Monitors
  Mutual exclusion
  Concurrency control
  Power management
  Process synchronization
Communications management
  Buffering
  Input / output
  Message passing
Virtual worlds software
  Interactive games
  Virtual worlds training simulations
Software system structures
  Embedded software
  Software architectures
    n-tier architectures
    Peer-to-peer architectures
Data flow architectures
Cooperating communicating processes
Layered systems
Publish-subscribe / event-based architectures
Electronic blackboards
Simulator / interpreter
Object oriented architectures
Tightly coupled architectures
Space-based architectures
3-tier architectures

Software system models
Petri nets
State systems
Entity relationship modeling
Model-driven software engineering
Feature interaction
Massively parallel systems

Ultra-large-scale systems
Distributed systems organizing principles
Cloud computing
Client-server architectures
Grid computing
Organizing principles for web applications

Real-time systems software
Abstraction, modeling and modularity

Software functional properties
Correctness
Synchronization
Functionality
Real-time schedulability
Consistency
Completeness
Access protection

Formal methods
Model checking
Software verification
Automated static analysis
Dynamic analysis

Extra-functional properties
Interoperability
Software performance
Software reliability
Software fault tolerance
Checkpoint / restart
Software safety
Software usability

Software notations and tools
General programming languages
Language types
- Parallel programming languages
- Distributed programming languages
- Imperative languages
- Object oriented languages
- Functional languages
- Concurrent programming languages
- Constraint and logic languages
- Data flow languages
- Extensible languages
- Assembly languages
- Multiparadigm languages
- Very high level languages

Language features
- Abstract data types
- Polymorphism
- Inheritance
- Control structures
- Data types and structures
- Classes and objects
- Modules / packages
- Constraints
- Recursion
- Concurrent programming structures
- Procedures, functions and subroutines
- Patterns
- Coroutines
- Frameworks

Formal language definitions
- Syntax
- Semantics

Compilers
- Interpreters
- Incremental compilers
- Retargetable compilers
- Just-in-time compilers
- Dynamic compilers
- Translator writing systems and compiler generators
- Source code generation
- Runtime environments
- Preprocessors
- Parsers

Context specific languages
- Markup languages
  - Extensible Markup Language (XML)
  - Hypertext languages
- Scripting languages
- Domain specific languages
Specialized application languages
API languages
Graphical user interface languages
Window managers
Command and control languages
Macro languages
Programming by example
State based definitions
Visual languages
Interface definition languages
System description languages
Design languages
Unified Modeling Language (UML)
Architecture description languages
System modeling languages
Orchestration languages
Integration frameworks
Specification languages
Development frameworks and environments
Object oriented frameworks
Software as a service orchestration systems
Integrated and visual development environments
Application specific development environments
Software configuration management and version control systems
Software libraries and repositories
Software maintenance tools
Software creation and management
Designing software
Requirements analysis
Software design engineering
Software design tradeoffs
Software implementation planning
Software design techniques
Software development process management
Software development methods
Rapid application development
Agile software development
Capability Maturity Model
Waterfall model
Spiral model
V-model
Design patterns
Risk management
Software development techniques
Software prototyping
Object oriented development
Flowcharts
Reusability
Software product lines
Error handling and recovery
Software verification and validation
Software prototyping
Operational analysis
Software defect analysis
Software testing and debugging
Fault tree analysis
Process validation
Walkthroughs
Pair programming
Use cases
Acceptance testing
Traceability
Formal software verification
Empirical software validation
Software post-development issues
Software reverse engineering
Documentation
Backup procedures
Software evolution
Software version control
Maintaining software
System administration
Collaboration in software development
Open source model
Programming teams

Theory of computation
Models of computation
Computability
Lambda calculus
Turing machines
Recursive functions
Probabilistic computation
Quantum computation theory
Quantum complexity theory
Quantum communication complexity
Quantum query complexity
Quantum information theory
Interactive computation
Streaming models
Concurrency
Parallel computing models
Distributed computing models
Process calculi
Timed and hybrid models
Abstract machines
Formal languages and automata theory
  Formalisms
    Algebraic language theory
    Rewrite systems
  Automata over infinite objects
  Grammars and context-free languages
  Tree languages
  Automata extensions
    Transducers
    Quantitative automata
Regular languages
Computational complexity and cryptography
  Complexity classes
  Problems, reductions and completeness
  Communication complexity
  Circuit complexity
  Oracles and decision trees
  Algebraic complexity theory
  Quantum complexity theory
  Proof complexity
  Interactive proof systems
  Complexity theory and logic
  Cryptographic primitives
  Cryptographic protocols
Logic
  Logic and verification
  Proof theory
  Modal and temporal logics
  Automated reasoning
  Constraint and logic programming
  Constructive mathematics
  Description logics
  Equational logic and rewriting
  Finite Model Theory
  Higher order logic
  Linear logic
  Programming logic
  Abstraction
  Verification by model checking
  Type theory
  Hoare logic
  Separation logic
Design and analysis of algorithms
  Graph algorithms analysis
    Network flows
    Sparsification and spanners
Shortest paths
Dynamic graph algorithms

Approximation algorithms analysis
- Scheduling algorithms
- Packing and covering problems
- Routing and network design problems
- Facility location and clustering
- Rounding techniques
- Stochastic approximation
- Numeric approximation algorithms

Mathematical optimization
- Discrete optimization
  - Network optimization
- Continuous optimization
  - Linear programming
  - Semidefinite programming
  - Convex optimization
  - Quasiconvex programming and unimodality
  - Stochastic control and optimization
  - Quadratic programming
  - Nonconvex optimization
- Mixed discrete-continuous optimization
  - Submodular optimization and polymatroids
  - Integer programming

Data structures design and analysis
- Data compression
- Pattern matching
- Sorting and searching
- Predecessor queries
- Cell probe models and lower bounds

Online algorithms
- Online learning algorithms
  - Scheduling algorithms
- Caching and paging algorithms
- K-server algorithms
- Adversary models

Parameterized complexity and exact algorithms
- Fixed parameter tractability
- W hierarchy

Streaming, sublinear and near linear time algorithms
- Bloom filters and hashing
- Sketching and sampling
- Lower bounds and information complexity
- Random order and robust communication complexity
- Nearest neighbor algorithms

Parallel algorithms
- MapReduce algorithms
- Self-organization
Shared memory algorithms
Vector / streaming algorithms
Massively parallel algorithms
Distributed algorithms
MapReduce algorithms
Self-organization
Algorithm design techniques
Backtracking
Branch-and-bound
Divide and conquer
Dynamic programming
Preconditioning
Concurrent algorithms
Randomness, geometry and discrete structures
Pseudorandomness and derandomization
Computational geometry
Generating random combinatorial structures
Random walks and Markov chains
Expander graphs and randomness extractors
Error-correcting codes
Random projections and metric embeddings
Random network models
Theory and algorithms for application domains
Machine learning theory
Sample complexity and generalization bounds
Boolean function learning
Unsupervised learning and clustering
Kernel methods
Support vector machines
Gaussian processes
Boosting
Bayesian analysis
Inductive inference
Online learning theory
Multi-agent learning
Models of learning
Query learning
Structured prediction
Reinforcement learning
Sequential decision making
Inverse reinforcement learning
Apprenticeship learning
Multi-agent reinforcement learning
Adversarial learning
Active learning
Semi-supervised learning
Markov decision processes
Regret bounds
Algorithmic game theory and mechanism design
Social networks
Algorithmic game theory
Algorithmic mechanism design
Solution concepts in game theory
Exact and approximate computation of equilibria
Quality of equilibria
Convergence and learning in games
Market equilibria
Computational pricing and auctions
Representations of games and their complexity
Network games
Network formation
Computational advertising theory

Database theory
Data exchange
Data provenance
Data modeling
Database query languages (principles)
Database constraints theory
Database interoperability
Data structures and algorithms for data management
Database query processing and optimization (theory)
Data integration
Logic and databases
Theory of database privacy and security
Incomplete, inconsistent, and uncertain databases

Semantics and reasoning
Program constructs
Control primitives
Functional constructs
Object oriented constructs
Program schemes
Type structures

Program semantics
Algebraic semantics
Denotational semantics
Operational semantics
Axiomatic semantics
Action semantics
Categorical semantics

Program reasoning
Invariants
Program specifications
Pre- and post-conditions
Program verification
Program analysis
Assertions
Mathematics of computing
Discrete mathematics
Combinatorics
- Combinatoric problems
- Permutations and combinations
- Combinatorial algorithms
- Generating functions
- Combinatorial optimization
- Combinatorics on words
- Enumeration
Graph theory
- Trees
- Hypergraphs
- Random graphs
- Graph coloring
- Paths and connectivity problems
- Graph enumeration
- Matchings and factors
- Graphs and surfaces
- Network flows
- Spectra of graphs
- Extremal graph theory
- Matroids and greedoids
- Graph algorithms
- Approximation algorithms
Probability and statistics
- Probabilistic representations
  - Bayesian networks
  - Markov networks
  - Factor graphs
  - Decision diagrams
  - Equational models
  - Causal networks
- Stochastic differential equations
- Nonparametric representations
  - Kernel density estimators
  - Spline models
  - Bayesian nonparametric models
Probabilistic inference problems
- Maximum likelihood estimation
- Bayesian computation
- Computing most probable explanation
- Hypothesis testing and confidence interval computation
- Density estimation
Quantile regression
Max marginal computation
Probabilistic reasoning algorithms
Variable elimination
Loopy belief propagation
Variational methods
Expectation maximization
Markov-chain Monte Carlo methods
  Gibbs sampling
  Metropolis-Hastings algorithm
  Simulated annealing
  Markov-chain Monte Carlo convergence measures
Sequential Monte Carlo methods
Kalman filters and hidden Markov models
Resampling methods
  Bootstrapping
  Jackknifing
Random number generation
Probabilistic algorithms
Statistical paradigms
Queueing theory
Contingency table analysis
Regression analysis
  Robust regression
Time series analysis
Survival analysis
Renewal theory
Dimensionality reduction
Cluster analysis
Statistical graphics
Exploratory data analysis
Stochastic processes
  Markov processes
Nonparametric statistics
Distribution functions
Multivariate statistics
Mathematical software
  Solvers
Statistical software
Mathematical software performance
Information theory
  Coding theory
Mathematical analysis
  Numerical analysis
    Computation of transforms
    Computations in finite fields
    Computations on matrices
    Computations on polynomials
Gröbner bases and other special bases
Number-theoretic computations
Interpolation
Numerical differentiation
Interval arithmetic
Arbitrary-precision arithmetic
Automatic differentiation
Mesh generation
Discretization
Mathematical optimization
Discrete optimization
Network optimization
Continuous optimization
Linear programming
Semidefinite programming
Convex optimization
Quasiconvex programming and unimodality
Stochastic control and optimization
Quadratic programming
Nonconvex optimization
Mixed discrete-continuous optimization
Submodular optimization and polymatroids
Integer programming
Differential equations
Ordinary differential equations
Partial differential equations
Differential algebraic equations
Differential variational inequalities
Calculus
Lambda calculus
Differential calculus
Integral calculus
Functional analysis
Approximation
Integral equations
Nonlinear equations
Quadrature
Continuous mathematics
Calculus
Lambda calculus
Differential calculus
Integral calculus
Topology
Point-set topology
Algebraic topology
Geometric topology
Continuous functions
Information systems

Data management systems

Database design and models
  Relational database model
  Entity relationship models
  Graph-based database models
    Hierarchical data models
    Network data models

Physical data models

Data model extensions
  Semi-structured data
  Data streams
  Data provenance
  Incomplete data
  Temporal data
  Uncertainty
  Inconsistent data

Data structures

Data access methods
  Multidimensional range search
  Data scans
  Point lookups
  Unidimensional range search
  Proximity search

Data layout
  Data compression
  Data encryption
  Record and block layout

Database management system engines

DBMS engine architectures

Database query processing
  Query optimization
  Query operators
  Query planning
  Join algorithms

Database transaction processing
  Data locking
  Transaction logging
  Database recovery

Record and buffer management

Parallel and distributed DBMSs
  Key-value stores
  MapReduce-based systems
  Relational parallel and distributed DBMSs

Triggers and rules

Database views
Integrity checking
Distributed database transactions
  Distributed data locking
  Deadlocks
  Distributed database recovery
Main memory engines
Online analytical processing engines
Stream management
Query languages
  Relational database query languages
    Structured Query Language
XML query languages
  XPath
  XQuery
Query languages for non-relational engines
  MapReduce languages
Call level interfaces
Database administration
  Database utilities and tools
  Database performance evaluation
  Autonomous database administration
  Data dictionaries
Information integration
  Deduplication
  Extraction, transformation and loading
  Data exchange
  Data cleaning
  Wrappers (data mining)
  Mediators and data integration
  Entity resolution
  Data warehouses
  Federated databases
Middleware for databases
  Database web servers
  Application servers
  Object-relational mapping facilities
  Data federation tools
  Data replication tools
  Distributed transaction monitors
  Message queues
  Service buses
  Enterprise application integration tools
  Middleware business process managers
Information storage systems
  Information storage technologies
    Magnetic disks
    Magnetic tapes
    Optical / magneto-optical disks
Storage class memory
  Flash memory
  Phase change memory
Disk arrays
Tape libraries
Record storage systems
  Record storage alternatives
    Heap (data structure)
    Hashed file organization
    Indexed file organization
    Linked lists
Directory structures
  B-trees
  Vnodes
  Inodes
  Extent-based file structures
Block / page strategies
  Slotted pages
  Intrapage space management
  Interpage free-space management
Record layout alternatives
  Fixed length attributes
  Variable length attributes
  Null values in records
Relational storage
  Horizontal partitioning
  Vertical partitioning
  Column based storage
  Hybrid storage layouts
  Compression strategies
Storage replication
  Mirroring
  RAID
  Point-in-time copies
  Remote replication
  Storage recovery strategies
Storage architectures
  Cloud based storage
  Storage network architectures
    Storage area networks
    Direct attached storage
    Network attached storage
Distributed storage
Storage management
  Hierarchical storage management
  Storage virtualization
  Information lifecycle management
  Version management
Storage power management
Thin provisioning

Information systems applications

Enterprise information systems
Intranets
Extranets
Enterprise resource planning
Enterprise applications
Data centers

Collaborative and social computing systems and tools
Blogs
Wikis
Reputation systems
Open source software
Social networking sites
Social tagging systems
Synchronous editors
Asynchronous editors

Spatial-temporal systems
Location based services
Geographic information systems
Sensor networks
Data streaming
Global positioning systems

Decision support systems
Data warehouses
Expert systems
Data analytics
Online analytical processing

Mobile information processing systems

Process control systems

Multimedia information systems
Multimedia databases
Multimedia streaming
Multimedia content creation
Massively multiplayer online games

Data mining
Data cleaning
Collaborative filtering
Association rules
Clustering
Nearest-neighbor search
Data stream mining

Digital libraries and archives
Computational advertising
Computing platforms

World Wide Web
Web searching and information discovery
Web search engines
   Web crawling
   Web indexing
   Page and site ranking
   Spam detection
Content ranking
Collaborative filtering
Social recommendation
Personalization
Social tagging
Online advertising
   Sponsored search advertising
   Content match advertising
   Display advertising
   Social advertising
Web mining
   Site wrapping
   Data extraction and integration
      Deep web
      Surfacing
      Search results deduplication
Web log analysis
   Traffic analysis
Web applications
   Internet communications tools
      Email
      Blogs
      Texting
      Chat
      Web conferencing
Social networks
Crowdsourcing
   Answer ranking
   Trust
   Incentive schemes
   Reputation systems
Electronic commerce
   Digital cash
   E-commerce infrastructure
   Electronic data interchange
   Electronic funds transfer
   Online shopping
   Online banking
   Secure online transactions
   Online auctions
Web interfaces
   Wikis
   Browsers
Mashups

Web services
- Simple Object Access Protocol (SOAP)
- RESTful web services
- Web Services Description Language (WSDL)
- Universal Description Discovery and Integration (UDDI)
- Service discovery and interfaces

Web data description languages
- Semantic web description languages
  - Resource Description Framework (RDF)
  - Web Ontology Language (OWL)
- Markup languages
  - Extensible Markup Language (XML)
  - Hypertext languages

Information retrieval
- Document representation
  - Document structure
  - Document topic models
  - Content analysis and feature selection
  - Data encoding and canonicalization
  - Document collection models
- Ontologies
- Dictionaries
- Thesauri

Information retrieval query processing
- Query representation
- Query intent
- Query log analysis
- Query suggestion
- Query reformulation

Users and interactive retrieval
- Personalization
- Task models
- Search interfaces
- Collaborative search

Retrieval models and ranking
- Rank aggregation
- Probabilistic retrieval models
- Language models
- Similarity measures
- Learning to rank
- Combination, fusion and federated search
- Information retrieval diversity
- Top-k retrieval in databases
- Novelty in information retrieval

Retrieval tasks and goals
- Question answering
- Document filtering
Recommender systems
Information extraction
Sentiment analysis
Expert search
Near-duplicate and plagiarism detection
Clustering and classification
Summarization
Business intelligence

Evaluation of retrieval results
Test collections
Relevance assessment
Retrieval effectiveness
Retrieval efficiency
Presentation of retrieval results

Search engine architectures and scalability
Search engine indexing
Search index compression
Distributed retrieval
Peer-to-peer retrieval
Retrieval on mobile devices
Adversarial retrieval
Link and co-citation analysis
Searching with auxiliary databases

Specialized information retrieval
Structure and multilingual text search
  Structured text search
  Mathematics retrieval
  Chemical and biochemical retrieval
  Multilingual and cross-lingual retrieval
Multimedia and multimodal retrieval
  Image search
  Video search
  Speech / audio search
  Music retrieval
Environment-specific retrieval
  Enterprise search
  Desktop search
  Web and social media search

Security and privacy
Cryptography
  Key management
  Public key (asymmetric) techniques
    Digital signatures
    Public key encryption
  Symmetric cryptography and hash functions
    Block and stream ciphers
Hash functions and message authentication codes
Cryptanalysis and other attacks
Information-theoretic techniques
Mathematical foundations of cryptography

Formal methods and theory of security
Trust frameworks
Security requirements
Formal security models
Logic and verification

Security services
Authentication
Biometrics
Graphical / visual passwords
Multi-factor authentication
Access control
Pseudonymity, anonymity and untraceability
Privacy-preserving protocols
Digital rights management
Authorization

Intrusion/anomaly detection and malware mitigation
Malware and its mitigation
Intrusion detection systems
Social engineering attacks
Spoofing attacks
Phishing

Security in hardware
Tamper-proof and tamper-resistant designs
Embedded systems security
Hardware security implementation
Hardware-based security protocols
Hardware attacks and countermeasures
Malicious design modifications
Side-channel analysis and countermeasures
Hardware reverse engineering

Systems security
Operating systems security
Mobile platform security
Trusted computing
Virtualization and security
Browser security
Distributed systems security
Information flow control
Denial-of-service attacks
Firewalls
Vulnerability management
Penetration testing
Vulnerability scanners
File system security
Network security
  Security protocols
  Web protocol security
  Mobile and wireless security
  Denial-of-service attacks
  Firewalls
Database and storage security
  Data anonymization and sanitization
  Management and querying of encrypted data
  Information accountability and usage control
  Database activity monitoring
Software and application security
  Software security engineering
  Web application security
  Social network security and privacy
  Domain-specific security and privacy architectures
  Software reverse engineering
Human and societal aspects of security and privacy
  Economics of security and privacy
  Social aspects of security and privacy
  Privacy protections
  Usability in security and privacy

**Human-centered computing**

Human computer interaction (HCI)
  HCI design and evaluation methods
    User models
    User studies
    Usability testing
    Heuristic evaluations
    Walkthrough evaluations
    Laboratory experiments
    Field studies
Interaction paradigms
  Hypertext / hypermedia
  Mixed / augmented reality
  Command line interfaces
  Graphical user interfaces
  Virtual reality
  Web-based interaction
  Natural language interfaces
  Collaborative interaction
Interaction devices
  Graphics input devices
  Displays and imagers
  Sound-based input / output
Keyboards
Pointing devices
Touch screens
Haptic devices

HCI theory, concepts and models
Interaction techniques
  Auditory feedback
  Text input
  Pointing
  Gestural input
Interactive systems and tools
  User interface management systems
  User interface programming
  User interface toolkits

Empirical studies in HCI
Interaction design
  Interaction design process and methods
    User interface design
    User centered design
    Activity centered design
    Scenario-based design
    Participatory design
    Contextual design
    Interface design prototyping
  Interaction design theory, concepts and paradigms
Empirical studies in interaction design
Systems and tools for interaction design
  Wireframes

Collaborative and social computing
  Collaborative and social computing theory, concepts and paradigms
    Social content sharing
    Collaborative content creation
    Collaborative filtering
    Social recommendation
    Social networks
    Social tagging
    Computer supported cooperative work
    Social engineering (social sciences)
    Social navigation
    Social media
  Collaborative and social computing design and evaluation methods
    Social network analysis
    Ethnographic studies
  Collaborative and social computing systems and tools
    Blogs
    Wikis
    Reputation systems
    Open source software
Social networking sites
Social tagging systems
Synchronous editors
Asynchronous editors
Empirical studies in collaborative and social computing
Collaborative and social computing devices
Ubiquitous and mobile computing
  Ubiquitous and mobile computing theory, concepts and paradigms
  Ubiquitous computing
  Mobile computing
  Ambient intelligence
Ubiquitous and mobile computing systems and tools
Ubiquitous and mobile devices
  Smartphones
  Interactive whiteboards
  Mobile phones
  Mobile devices
  Portable media players
  Personal digital assistants
  Handheld game consoles
  E-book readers
  Tablet computers
Ubiquitous and mobile computing design and evaluation methods
Empirical studies in ubiquitous and mobile computing
Visualization
  Visualization techniques
    Treemaps
    Hyperbolic trees
    Heat maps
    Graph drawings
    Dendrograms
    Cladograms
Visualization application domains
  Scientific visualization
  Visual analytics
  Geographic visualization
  Information visualization
Visualization systems and tools
  Visualization toolkits
Visualization theory, concepts and paradigms
Empirical studies in visualization
Visualization design and evaluation methods
Accessibility
  Accessibility theory, concepts and paradigms
  Empirical studies in accessibility
  Accessibility design and evaluation methods
  Accessibility technologies
  Accessibility systems and tools
Computing methodologies

Symbolic and algebraic manipulation
Symbolic and algebraic algorithms
  Combinatorial algorithms
  Algebraic algorithms
  Nonalgebraic algorithms
  Symbolic calculus algorithms
  Exact arithmetic algorithms
  Hybrid symbolic-numeric methods
  Discrete calculus algorithms
  Number theory algorithms
  Equation and inequality solving algorithms
  Linear algebra algorithms
  Theorem proving algorithms
  Boolean algebra algorithms
  Optimization algorithms

Computer algebra systems
  Special-purpose algebraic systems

Representation of mathematical objects
  Representation of exact numbers
  Representation of mathematical functions
  Representation of Boolean functions
  Representation of polynomials

Parallel computing methodologies
  Parallel algorithms
    MapReduce algorithms
    Self-organization
    Shared memory algorithms
    Vector / streaming algorithms
    Massively parallel algorithms

Parallel programming languages

Artificial intelligence
  Natural language processing
    Information extraction
    Machine translation
    Discourse, dialogue and pragmatics
  Natural language generation
  Speech recognition
  Lexical semantics
  Phonology / morphology
  Language resources

Knowledge representation and reasoning
  Description logics
  Semantic networks
  Nonmonotonic, default reasoning and belief revision
  Probabilistic reasoning
  Vagueness and fuzzy logic
Causal reasoning and diagnostics
Temporal reasoning
Cognitive robotics
Ontology engineering
Logic programming and answer set programming
Spatial and physical reasoning
Reasoning about belief and knowledge

Planning and scheduling
Planning for deterministic actions
Planning under uncertainty
Multi-agent planning
Planning with abstraction and generalization
Robotic planning

Search methodologies
Heuristic function construction
Discrete space search
Continuous space search
Randomized search
Game tree search
Abstraction and micro-operators
Search with partial observations

Control methods
Robotic planning
Computational control theory
Motion path planning

Philosophical/theoretical foundations of artificial intelligence
Cognitive science
Theory of mind

Distributed artificial intelligence
Multi-agent systems
Intelligent agents
Mobile agents
Cooperation and coordination

Computer vision
Computer vision tasks
Biometrics
Scene understanding
Activity recognition and understanding
Video summarization
Visual content-based indexing and retrieval
Visual inspection
Vision for robotics
Scene anomaly detection

Image and video acquisition
Camera calibration
Epipolar geometry
Computational photography
Hyperspectral imaging
Motion capture
3D imaging
Active vision

Computer vision representations
Image representations
Shape representations
Appearance and texture representations
Hierarchical representations

Computer vision problems
Interest point and salient region detections
Image segmentation
Video segmentation
Shape inference
Object detection
Object recognition
Object identification
Tracking
Reconstruction
Matching

Machine learning
Learning paradigms
Supervised learning
  Ranking
  Learning to rank
  Supervised learning by classification
  Supervised learning by regression
  Structured outputs
  Cost-sensitive learning
Unsupervised learning
  Cluster analysis
  Anomaly detection
  Mixture modeling
  Topic modeling
  Source separation
  Motif discovery
  Dimensionality reduction and manifold learning
Reinforcement learning
  Sequential decision making
  Inverse reinforcement learning
  Apprenticeship learning
  Multi-agent reinforcement learning
  Adversarial learning
Multi-task learning
  Transfer learning
  Lifelong machine learning
Learning under covariate shift

Learning settings
  Batch learning
Online learning settings
Learning from demonstrations
Learning from critiques
Learning from implicit feedback
Active learning settings
Semi-supervised learning settings

Machine learning approaches
Classification and regression trees
Kernel methods
Support vector machines
Gaussian processes
Neural networks
Logical and relational learning
Inductive logic learning
Statistical relational learning
Learning in probabilistic graphical models
Maximum likelihood modeling
Maximum entropy modeling
Maximum a posteriori modeling
Mixture models
Latent variable models
Bayesian network models
Learning linear models
Perceptron algorithm
Factorization methods
Non-negative matrix factorization
Factor analysis
Principal component analysis
Canonical correlation analysis
Latent Dirichlet allocation
Rule learning
Instance-based learning
Markov decision processes
Partially-observable Markov decision processes
Stochastic games
Learning latent representations
Deep belief networks

Machine learning algorithms
Dynamic programming for Markov decision processes
Value iteration
Q-learning
Policy iteration
Temporal difference learning
Approximate dynamic programming methods
Ensemble methods
Boosting
Bagging
Spectral methods
Feature selection
Regularization
Cross-validation
Modeling and simulation
  Model development and analysis
  Modeling methodologies
  Model verification and validation
  Uncertainty quantification
Simulation theory
  Systems theory
  Network science
Simulation types and techniques
  Uncertainty quantification
  Quantum mechanic simulation
  Molecular simulation
  Rare-event simulation
  Discrete-event simulation
  Agent / discrete models
  Distributed simulation
  Continuous simulation
  Continuous models
  Real-time simulation
  Interactive simulation
  Multiscale systems
  Massively parallel and high-performance simulations
Data assimilation
Scientific visualization
Visual analytics
Simulation by animation
Simulation support systems
  Simulation environments
  Simulation languages
  Simulation tools
Simulation evaluation
Computer graphics
  Animation
    Motion capture
    Procedural animation
    Physical simulation
    Motion processing
    Collision detection
  Rendering
    Rasterization
    Ray tracing
    Non-photorealistic rendering
    Reflectance modeling
    Visibility
Image manipulation
Computational photography
Image processing
Texturing
Image-based rendering
Antialiasing
Graphics systems and interfaces
Graphics processors
Graphics input devices
Mixed / augmented reality
Perception
Graphics file formats
Virtual reality
Image compression
Shape modeling
Mesh models
Mesh geometry models
Parametric curve and surface models
Point-based models
Volumetric models
Shape analysis
Distributed computing methodologies
Distributed algorithms
MapReduce algorithms
Self-organization
Distributed programming languages
Concurrent computing methodologies
Concurrent programming languages
Concurrent algorithms

Applied computing
Electronic commerce
Digital cash
E-commerce infrastructure
Electronic data interchange
Electronic funds transfer
Online shopping
Online banking
Secure online transactions
Online auctions
Enterprise computing
Enterprise information systems
Intranets
Extranets
Enterprise resource planning
Enterprise applications
Data centers
Business process management
  Business process modeling
  Business process management systems
  Business process monitoring
  Cross-organizational business processes
  Business intelligence
Enterprise architectures
  Enterprise architecture management
  Enterprise architecture frameworks
  Enterprise architecture modeling
Service-oriented architectures
Event-driven architectures
Business rules
Enterprise modeling
Enterprise ontologies, taxonomies and vocabularies
Enterprise data management
Reference models
Business-IT alignment
IT architectures
IT governance
Enterprise computing infrastructures
Enterprise interoperability
  Enterprise application integration
  Information integration and interoperability
Physical sciences and engineering
  Aerospace
    Avionics
  Archaeology
  Astronomy
  Chemistry
  Earth and atmospheric sciences
    Environmental sciences
  Engineering
    Computer-aided design
  Physics
  Mathematics and statistics
  Electronics
    Avionics
  Telecommunications
    Internet telephony
Life and medical sciences
  Computational biology
    Molecular sequence analysis
    Recognition of genes and regulatory elements
    Molecular evolution
    Computational transcriptomics
    Biological networks
    Sequencing and genotyping technologies
Imaging
Computational proteomics
Molecular structural biology
Computational genomics
Genomics
Computational genomics
Systems biology
Consumer health
Health care information systems
Health informatics
Bioinformatics
Metabolomics / metabonomics
Genetics
Population genetics
Proteomics
Computational proteomics
Transcriptomics
Law, social and behavioral sciences
Anthropology
Ethnography
Law
Psychology
Economics
Sociology
Computer forensics
Surveillance mechanisms
Investigation techniques
Evidence collection, storage and analysis
Network forensics
System forensics
Data recovery
Arts and humanities
Fine arts
Performing arts
Architecture (buildings)
   Computer-aided design
Language translation
Media arts
Sound and music computing
Computers in other domains
Digital libraries and archives
Publishing
Military
   Cyberwarfare
Cartography
Agriculture
Computing in government
   Voting / election technologies
E-government
Personal computers and PC applications
  Word processors
  Spreadsheets
  Computer games
  Microcomputers
Operations research
  Consumer products
  Industry and manufacturing
    Supply chain management
    Command and control
  Computer-aided manufacturing
  Decision analysis
  Transportation
  Forecasting
  Marketing
Education
  Digital libraries and archives
  Computer-assisted instruction
  Interactive learning environments
  Collaborative learning
  Learning management systems
  Distance learning
  E-learning
  Computer-managed instruction
Document management and text processing
  Document searching
  Document management
    Text editing
    Version control
    Document metadata
  Document capture
    Document analysis
    Document scanning
    Graphics recognition and interpretation
    Optical character recognition
    Online handwriting recognition
Document preparation
  Markup languages
    Extensible Markup Language (XML)
    Hypertext languages
  Annotation
  Format and notation
  Multi / mixed media creation
  Image composition
  Hypertext / hypermedia creation
  Document scripting languages
Social and professional topics

Professional topics

Computing industry
  Industry statistics
  Computer manufacturing
Sustainability

Management of computing and information systems
  Project and people management
    Project management techniques
    Project staffing
    Systems planning
    Systems analysis and design
    Systems development
    Computer and information systems training

Implementation management
  Hardware selection
  Computing equipment management
  Pricing and resource allocation

Software management
  Software maintenance
  Software selection and adaptation

System management
  Centralization / decentralization
  Technology audits
  Quality assurance

Network operations
File systems management

Information system economics

History of computing
  Historical people
  History of hardware
  History of software
  History of programming languages
  History of computing theory

Computing education
  Computational thinking
Accreditation
Model curricula

Computing education programs
  Information systems education
  Computer science education
    CS1
  Computer engineering education
  Information technology education
  Information science education
  Computational science and engineering education
  Software engineering education
Informal education
Computing literacy
Student assessment
K-12 education
Adult education
Computing and business
  Employment issues
  Automation
  Computer supported cooperative work
  Economic impact
  Offshoring
  Reengineering
  Socio-technical systems
Computing profession
  Codes of ethics
  Employment issues
  Funding
  Computing occupations
  Computing organizations
  Testing, certification and licensing
  Assistive technologies
Computing / technology policy
  Intellectual property
    Digital rights management
    Copyrights
    Software reverse engineering
    Patents
    Trademarks
    Internet governance / domain names
    Licensing
    Treaties
    Database protection laws
    Secondary liability
    Soft intellectual property
    Hardware reverse engineering
Privacy policies
Censorship
  Pornography
  Hate speech
  Political speech
  Technology and censorship
  Censoring filters
Surveillance
  Governmental surveillance
  Corporate surveillance
Commerce policy
  Taxation
  Transborder data flow
Antitrust and competition
Governmental regulations
Online auctions policy
Consumer products policy
Network access control
Censoring filters
Broadband access
Net neutrality
Network access restrictions
   Age-based restrictions
   Acceptable use policy restrictions
Universal access
Computer crime
   Social engineering attacks
   Spoofing attacks
   Phishing
Identity theft
Financial crime
   Malware / spyware crime
Government technology policy
   Governmental regulations
Import / export controls
Medical information policy
   Medical records
   Personal health records
   Genetic information
   Patient privacy
   Health information exchanges
Medical technologies
   Remote medicine

User characteristics
   Race and ethnicity
   Religious orientation
Gender
   Men
   Women
Sexual orientation
People with disabilities
Geographic characteristics
Cultural characteristics
Age
   Children
   Seniors
   Adolescents
Proper nouns: People, technologies and companies

Companies

Accenture
Adobe Systems Incorporated
Advanced Information Systems
Agere Systems, Inc.
Agilent Technologies
Alcatel-Lucent
    Bell Labs
AOL, Inc.
Apple, Inc.
AT&T
BAE Systems
BEA Systems, Inc.
Blizzard Entertainment
Blue Sky Studios
Borland Software Corporation
CA Technologies
Cable & Wireless Worldwide
Cadence Design Systems
China Telecom Corporation Limited
Cisco Systems, Inc.
Citrix Systems, Inc.
Commerce One
Compaq Computer Corporation
Corel Corporation
Dell Computer Corporation
DiamondCluster International, Inc.
Digital Equipment Corporation
eBay Inc.
EIS, Inc.
EMC Corporation
Ericsson
Ernst & Young
Forrester Research
Gartner Group
General Dynamics
General Electric
Google Inc.
Hewlett-Packard Company
    HP Labs
Infineon Technologies
Infusion
Intel Corporation
International Business Machines Corporation
Organizations

ABET, Inc.
Computing Accreditation Commission
American Mathematical Society
American National Standards Institute
American Statistical Association
Ames Research Center
Apache Software Foundation
Argonne National Laboratory
Association for Computing Machinery
Association for Information Systems
Brazilian Computer Society
British Computer Society
Clay Mathematics Institute
Charles Babbage Institute
Computer History Museum
Computer Press Association
Computing Community Consortium
Computing Research Association
Computing Technology Industry Association
Computer Science Teachers Association
Courant Institute of Mathematical Sciences
CSAB
Defense Advanced Research Projects Agency
Eclipse Foundation
Electronic Frontier Foundation
Electronic Visualization Laboratory
European Network and Information Security Agency
European Telecommunications Standards Institute
Federal Communications Commission
Free Software Foundation
Human Factors and Ergonomics Society
IEEE Computer Society
 test Technology Technical Council
International Computer Music Association
International Game Developers Association
International Organization for Standardization
International Software Benchmarking Standards Group Limited
ITU
Isaac Newton Institute for Mathematical Sciences
JISC
Jet Propulsion Laboratory
Joint Photographic Experts Group

Langley Research Center
Lawrence Berkeley National Laboratory
Lawrence Livermore National Laboratory


Linux Professional Institute
London Mathematical Society
Los Alamos National Laboratory
Massachusetts Institute of Technology
  MIT Media Lab
  Personal Robots Group
Max Planck Institutes
Moving Picture Experts Group
Mozilla Foundation
National Academy of Engineering
National Academy of Sciences
National Center for Education Statistics
National Institute of Standards and Technology
National Institutes of Health
National Research Council
National Science Foundation
Oak Ridge National Laboratory
Object Management Group
Open Network Laboratory
OSGi Alliance
Operational Research Society
Open Knowledge Society
Open Source Initiative
Pacific Northwest National Laboratory
Patent and Trademark Office
Royal Statistical Society
San Diego Supercomputer Center
Sandia National Laboratories
Semiconductor Industry Association
Software Engineering Institute
SLAC National Accelerator Laboratory
Systems Research Center
TDWI
  The Open Group
Transaction Processing Performance Council
Trusted Computing Group
Viewpoints Research Institute
Wikimedia Foundation, Inc.
World Intellectual Property Organization
World Wide Web Consortium
People in computing
A. van Wijngaarden
Ada Lovelace
Alan Cooper
Alan Curtis Kay
Alan J. Perlis
Alan Mathison Turing
Allen Kent
Allen Newell
An’an Wang
Andrew S. Grove
Barbara Liskov
Barry W. Boehm
Bill Gates
Bill Joy
Bill Millard
Bjarne Stroustrup
Blaise Pascal
Bruce Schneier
C. A. R. Hoare
Charles Babbage
Charles Tandy
Claude Elwood Shannon
Clive Sinclair
Cyril W. Cleverdon
David Hilbert
David Patterson
David Sarnoff
Donald Ervin Knuth
Douglas R. Hofstadter
Edmund Callis Berkeley
Edvard Scheutz
Elliot Irving Organick
Gary McGraw
Georg Scheutz
Gene H. Golub
Gordon Bell
Grace Murray Hopper
H. D. Goode
Harry H. Goode
Harvey M. Deitel
Herbert A. Simon
Herbert R. J. Grosch
Herman H. Goldstine
Herman Hollerith
Ivar Jacobson
James Gosling
J. H. Wilkinson
J. Presper Eckert
J. Richard Buchi
Jakob Nielsen
Jay Wright Forrester
Jim Blinn
Jim Gray
John Vincent Atanasoff
John Cocke
John McCarthy
John R. Pasta
John Sculley
John Von Neumann
John W. Mauchly
Jon Kleinberg
Kazimierz Kuratowski
Kent Beck
Konrad Zuse
Kurt Godel
Linus Torvalds
Marian Smoluchowski
Mark D. Weiser
Martin Fowler
Marvin Lee Minsky
Maurice V. Wilkes
Peter J. Denning
Peter Norton
R. Milner
Richard M. Karp
Robert R. Everett
Seymour Papert
Stefan Banach
Steve Jobs
Thomas J. Watson
Thomas Watson, Jr.
Vannevar Bush
William C. Norris

Technologies
ActionScript
ActiveX
Ada language
ANSI C
Ajax
AppleScript
AutoCAD
BASIC
Bluetooth
Business Process Execution Language
CDMA systems
Cell Broadband Engine
CMOS
CORBA
Datalog
DB2
DNS (Domain Name System)
DOS
Dreamweaver
DSL
DSM
DVDs
Eclipse
Ethernet
Excel
CD-ROMs
Facebook
Internet Explorer
Chrome
Firefox
Flickr
Fortran
FreeBSD
Gmail
Google Earth
Google
Google Maps
Google Scholar
GSM
Haskell
HDTV
HP-UX
InfiniBand
IP Multimedia Subsystem
iPad
iPhone
iPod
IPTV
IPv6
JAVA ME
JavaScript
JPEG
JSP
LAPACK
Linux
Lotus Notes
Macintosh OS
Macintosh
Mathematica
MATLAB
MIMO Systems
Mobile IP
WiMAX
MODIS
MP3
MS-DOS
MSN (portal)
Myspace
MySQL
NetWare
OFDM System
Office
OpenMP
Oracle Database
Outlook
PDF
Pentium
Photoshop
PlanetLab
Pocket PC
PowerPC
PowerPoint
Prolog
QuarkXPress
QuickBooks
Quicken
QuickTime
Ruby on Rails
RISC processors
Samba
SELinux
SharePoint
SIMD architectures
Simulink
Smalltalk
Short Message Service
SNMP
Solaris
SONET
SPARC
SQL Server
Secure Sockets Layer
Skype
TMS320C
Transport Layer Security
TREC