DESCRIPTION

Computer Networks is an international, archival journal providing a publication vehicle for complete coverage of all topics of interest to those involved in the computer communications networking area. The audience includes researchers, managers and operators of networks as well as designers and implementors. The Editorial Board will consider any material for publication that is of interest to those groups.

SUBJECT COVERAGE

The topics covered by the journal but not limited to these are:

1. Communication Network Architectures:
New design contributions on Local Area Networks (LANs), Metropolitan Area Networks (MANs), Wide Area Networks (WANs) including Wired, Wireless, Mobile, Cellular, Sensor, Optical, IP, ATM, and other related network technologies, as well as new switching technologies and the integration of various networking paradigms.

2. Communication Network Protocols:
New design contributions on all protocol layers except the Physical Layer, considering all types of networks mentioned above and their performance evaluation; novel protocols, methods and algorithms related to, e.g., medium access control, error control, routing, resource discovery, multicasting, congestion and flow control, scheduling, multimedia quality of service, as well as protocol specification, testing and verification.

3. Network Services and Applications:
Web, Web caching, Web performance, Middleware and operating system support for all types of networking, electronic commerce, quality of service, new adaptive applications, and multimedia services.

4. Network Security and Privacy:
Security protocols, authentication, denial of service, anonymity, smartcards, intrusion detection, key management, viruses and other malicious codes, information flow, data integrity, mobile code and agent security.

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Including network pricing, network system software, quality of service, signaling protocols, mobility management, power management and power control algorithms, network planning, network dimensioning, network reliability, network performance measurements, network modeling and analysis, and overall system management.

6. **Discrete Algorithms and Discrete Modeling**

Algorithmic and discrete aspects in the context of computer networking as well as mobile and wireless computing and communications. Fostering cooperation among practitioners and theoreticians in this field.

**TYPES OF CONTRIBUTIONS CONSIDERED**

The primary purpose of the journal is to publish original and complete papers covering a specific topic or project in the above mentioned areas in sufficient detail and depth to be of practical use to interested readers. The readers should benefit from the novel solutions and analyses presented in the papers. Enhanced, extended versions of quality papers presented at conferences or workshops can be submitted to our journal for review. Note that papers which were already published with the same contents or simultaneous submission of the same paper to other journals or conferences will not be considered for publication in our journal and will be immediately rejected.

**Dataset Articles.** Computer Networks also publishes *micro-articles* that describe *open datasets* available in a redacted and organized way. The purpose is for researchers to easily share and reuse each other's datasets by publishing data articles that:

(i) Describe collected data in detail, facilitating reproducibility of experiments and improvements over proposed techniques, thus promoting rigorous experimentation and data analysis.

(ii) Describe tools developed to collect, analyze, and visualize data.

**Open-Source Software Articles.** Computer Networks additionally publishes micro-articles that describe open source software that has been used to obtain scholarly results in the area of computer networks. This may include articles describing discrete-event or other simulators, emulation tools, software implementations of networking and communication functionalities and protocols, standard implementations, monitoring tools, among others.

**AUDIENCE**

Managers and Operators of Networks as well as Designers, Implementors, Researchers, Regulatory Lawyers, Economists, Policy Analysts and Sociologists specializing in the area.

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INTRODUCTION

Welcome to the online submission and editorial system for Computer Networks.

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The topics covered by the journal but not limited to these are:

1. Communication Network Architectures
2. Communication Network Protocols
3. Network Services and Applications
4. Network Security and Privacy
5. Network Operation and Management
6. Discrete Algorithms and Discrete Modeling

TYPES OF CONTRIBUTIONS CONSIDERED

The primary purpose of Computer Networks is to publish original and complete research papers covering a specific topic or project in the above-mentioned areas in sufficient detail and depth to be of practical use to interested readers.

Note that papers that were already published with the same content or simultaneous submission of the same paper to other journals or conferences will not be considered for publication in our journal and will be immediately rejected.

Dataset Articles. Computer Networks also publishes micro-articles that describe open datasets available in a redacted and organized way. The purpose is for researchers to easily share and reuse each other's datasets by publishing data articles that:

(i) Describe collected data in detail, facilitating reproducibility of experiments and improvements over proposed techniques, thus promoting rigorous experimentation and data analysis.
(ii) Describe tools developed to collect, analyze, and visualize data.

Open-Source Software Articles. Computer Networks additionally publishes micro-articles that describe open source software that has been used to obtain scholarly results in the area of computer networks. This may include articles describing discrete-event or other simulators, emulation tools, software implementations of networking and communication functionalities and protocols, standard implementations, monitoring tools, among others.

Types of paper

Full Article

Computer Networks publishes original and complete articles covering a specific topic or project in the above-mentioned areas in sufficient detail and depth to be of practical use to interested readers. The readers should benefit from the novel solutions and analyses presented in the papers. Enhanced, extended versions of quality papers presented at conferences or workshops can be submitted to our journal for review.

Micro Article
Computer Networks publishes two types of micro articles

1. Dataset Articles
2. Open-Source Software Articles

1. Dataset Articles

Dataset articles describe datasets made publicly available through a repository. These articles ensure that data, which is often buried in supplementary material, is actively peer-reviewed, curated, formatted, indexed, given a DOI and publicly available to all upon publication. All Dataset Article submissions must contain data produced and owned by either the author or the author’s institution. Computer Networks will not accept any submissions that contain datasets with scant variables or samples.

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