

PACMNET V3, N3, September 2025 Editorial

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The Proceedings of the ACM on Networking (PACMNET) series showcases top-tier research in emerging computer networks and their applications. We welcome submissions introducing new technologies, innovative experiments, creative applications of networking technologies, and fresh insights gained through analysis. Supported by the ACM Special Interest Group on Communications and Computer Networks (SIGCOMM), the journal is backed by a distinguished Editorial Board composed of leading researchers in the field.

This issue is a part of the third volume of PACMNET. It features seven articles, all submitted by the December 2024 deadline, when a total of 75 submissions were received. Each submission underwent a thorough review process involving more than 90 Editors, coordinated by two Associate Editors. In the initial phase, every article received a minimum of three reviews. Following an online discussion, roughly half of the submissions were rejected, while the other half advanced to a second review phase. In this phase, Editors produced at least two additional reviews per article. After a second discussion phase, the Editors met online to decide which articles to accept after a minor revision, which to offer a "one-shot-major" revision opportunity, and which to reject. Nine articles have been offered a one-shot major revision option. These have been revised by their authors based on the extensive feedback provided by the Editors, who checked the revised version after modifications. After the re-review phase of the one-shot major revisions, seven papers were accepted and appear in this issue of PACMNET.

The seven papers explore key challenges and innovations in modern networking. Several focus on network observability, such as FAT-INT, which reduces telemetry overhead through frequency-aware sampling, and GeoResolver, which improves IP geolocation using DNS redirection patterns. Two studies analyze IPv6 scanning, revealing evolving scanner behaviors and proposing better monitoring strategies. Another paper evaluates eBPF's limitations, showing it doesn't benefit all networked applications and may introduce deployment issues. Exp-PIFO introduces a lightweight packet scheduling method that outperforms traditional approaches while using minimal memory. Finally, a study on Kubernetes security uncovers widespread network misconfigurations that enable lateral movement, highlighting the need for better configuration practices. Together, these works emphasize the importance of balancing performance, scalability, and security in today's complex network environments.

We want to express our gratitude to all those who contributed to this issue of PACMNET, especially the Authors for submitting their finest work and the Associate Editors for offering valuable feedback in their reviews and engaging in the discussions. Our thanks also go to the

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