

50 Years of TOCS

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This year marks the 50th anniversary of the journal *Theory of Computing Systems* (*TOCS*). The last two Editors-in-Chief of the journal share some thoughts on this auspicious occasion.

The past fifty years have seen computers become a transformative force across the world. We wear them on—sometimes even in—our bodies. We find sophisticated computers everywhere: controlling our cars, regulating our home appliances, orchestrating daily commerce, and, of course, impinging all facets of communication, from the phones in our pockets to the remote meetings we attend over the Internet.

The current ubiquity of computers has been enabled by a literal explosion of technological development. Concurrent with the growth in technology over the past decades has been the development of mathematical tools that have enabled a vibrant theoretical world that—sometimes leading, sometimes trailing—strives to understand new technologies in ways that are both foundational and algorithmic. The resulting theoretical understanding has engendered rational measures to control new technology, even while suggesting avenues for sophisticated applications of the technology.

TOCS has been a full player in the development of the theoretical side of the world of technology and computers. Announcing our intention to be part of this world via our name change, from our original *Mathematical Systems Theory* to our current

This article is part of the Topical Collection on 50th Anniversary

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Theory of Computing Systems, we have (happily, successfully) recruited to our Editorial Board leaders in both the foundational and algorithmic branches of theoretical computer science research.

This celebratory issue is extraordinary in a number of ways. We have departed from our customary practice of publishing only referred original research papers by inviting largely expository, unreviewed papers by several members of our excellent Editorial Board, on topics of their choosing. We hope that you enjoy the result.