

Artificial Intelligence in Smart Cities for Citizens: Trends, Challenges, and Promises. A Bibliometric Text Mining Analysis

Friday 19 September 2025 10:45 (15 minutes)

Over the last decade, cities have become increasingly digitalized with the adoption of Artificial Intelligence (AI) technologies. While these changes encompass economic, technological, and infrastructure transformation, citizens remain at the core of the cities as users, co-creators, and beneficiaries of AI urban innovations. Our study presents a bibliometric text-mining analysis of literature from the last 15 years (2010-2024). We used metadata from 1235 publications indexed in the Web of Science on the intersection of AI, cities, and citizens. Our results emphasize the most influential publications, thematic clusters, and trends. Moreover, the analysis shows complementary technologies and techniques used alongside AI technologies. Our analysis also highlights the importance of governance, ethical implications, privacy, security, health, transparency, and participatory design when using and creating AI smart technologies for cities. By providing a mapping of the scientific themes and emerging trends, our study is relevant for researchers and policymakers interested in citizen-centric AI technologies for cities.

Author: Dr NĂSTASĂ, Anamaria (National Scientific Research Institute for Labour and Social Protection; Centre for European Studies, Alexandru Ioan Cuza University)

Co-authors: ROSNER, Daniel (National University of Science and Technology POLITEHNICA Bucharest); Dr BOSTAN, Viorel (Technical University of Moldova)

Presenter: Dr NĂSTASĂ, Anamaria (National Scientific Research Institute for Labour and Social Protection; Centre for European Studies, Alexandru Ioan Cuza University)

Session Classification: Social Aspects of Networking Environment Today

Track Classification: Social Aspects of Networking Environment Today