Car manufacturers are becoming like software companies in their use of big data, machine learning, and artificial intelligence (AI) to understand consumer driving behaviors. These days, a car is not just for going from point A to point B, but rather delivers a holistic experience that revolves around our daily activities, with the future being the autonomous vehicle. Even though there has been considerable progress toward connected vehicle technologies, traffic and transportation, and cloud-based computing, major challenges remain in integrating these technologies into our society to create a seamless digital mobility lifestyle.

This special issue of *IT Professional* intends to explore recent advances that address these challenges for connected and autonomous vehicles, providing a perspective of the current state of the art and the issues that need to be addressed to make connected and autonomous vehicles become mainstream for consumers. Topics of interest include, but are not limited to, the following:

- Autonomous vehicles and autonomous driving
- Connected and intelligent vehicle applications and cloud-based services
- Machine learning systems, algorithms, and AI in connected and autonomous vehicles
- Connected digital and life experiences in the vehicle
- Cyber-physical systems and technologies, including IoT and embedded systems
- Contextual and personalized recommendation engines
- Privacy and security issues for connected and autonomous driving
- Legal issues and government perspectives
- Frameworks, scalable platform, and architectures for connected and autonomous driving
- Social implications and community experiences
- New computing paradigms, including edge computing
- New business models and ecosystems

**Submissions**

Feature articles should be no longer than 4,200 words and have no more than 20 references (with tables and figures counting as 300 words). Illustrations are welcome. For author guidelines, including sample articles, see www.computer.org/portal/web/peerreviewmagazines/acitpro. Submit your article at https://mc.manuscriptcentral.com/itpro-cs.

**Questions?**

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