

Minitrack: Cloud Computing and Sustainability

Green IS (SIGGREEN)

AMCIS 2022

Minneapolis, Minnesota, August 10-14, 2022

Call for Papers

Cloud computing—providing IT services (both infrastructure/hardware and software) on demand over a network—has been widely adopted by businesses across industries due to such benefits as flexibility, scalability, always-on availability, and pay-as-you-go pricing. The widespread adoption of cloud computing over the past decade has sparked debates on its environmental impacts among practitioners and academics alike. From the perspective of sustainability, cloud computing is differentiated from traditional IT investments and IT outsourcing in that it has transformed the way IT resources (both infrastructure/hardware and software) are procured, thereby altering IT's implications for sustainability and energy consumption not only for cloud service providers (vendors), but for service users, which calls for research from novel perspectives.

On one hand, cloud services may come at a significant cost to the environment, as data centers consume a massive amount of energy for supporting cloud services. On the other hand, cloud computing can allow business organizations to optimize IT resource utilization by replacing internal IT infrastructure with cloud-based IT services accessible on demand over a network, potentially enhancing energy efficiency. Moreover, on-demand cloud services can provide low-cost access to scalable, high-powered software running on the cloud that confers sustainability benefits, which could not be achieved through in-house development or traditional software licensing. Cloud-based services (e.g., cloud-based collaboration tools) also help organizations build climate resilience for adapting to climate change, in a similar way that it has played a role in coping with COVID-19.

This mini-track provides a forum for presenting and discussing original research highlighting the opportunities and challenges toward sustainability related to designing, deploying, and using cloud computing from the IS perspective. In particular, we encourage submissions that address broad topics of Green IT and Green IS from the perspectives of not only cloud service vendors (e.g., data centers), but also cloud service users and other stakeholders (across various levels including individuals, organizations, and nations). This mini-track welcomes empirical (qualitative and quantitative) studies as well as design-oriented research and conceptual/theoretical papers that leverage the multiple perspectives of IS toward sustainability in the era of cloud computing.

Topics of interest include, but are not limited to:

- Adoption and diffusion of cloud computing by organizations and individuals to address sustainability concerns
- Sustainability implications of in-house and outsourced IT
- Use of cloud computing to support sustainable business processes

- Performance implications of cloud computing and sustainability
- Development of cloud-based services and systems for sustainability
- Energy-efficient data centers
- Cloud-based environmental/energy management systems
- Application of cloud computing to climate change adaptation
- Application of cloud computing for sustainability in different sectors, such as smart grids, transportation, agriculture, smart manufacturing, smart cities, and others
- Public policy related to cloud computing with implications for sustainability
- Global and cross-border issues in cloud computing and sustainability

Important Dates:

- January 15, 2022: Submission Open at PCS (<https://new.precisionconference.com/submissions>)
- March 1, 2022: Submission Deadline
- April 15, 2022: Acceptance Notification
- April 25, 2022: Revised, Camera-Ready Paper Deadline

We look forward to receiving your best work for the minitrack of *Cloud Computing and Sustainability*. If you have any questions, feel free to contact the minitrack co-chairs.

Minitrack Co-Chairs:

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