

Call For Papers: *GreenMetrics 2010* Workshop
Monday June 14, 2010
Columbia University, New York, NY

In conjunction with SIGMETRICS 2010
Sponsored by ACM SIGMETRICS

Global climate change is a topic of increasing importance in modern society. The primary objective of this workshop is to explore how improvements to or new uses of Information and Communication Technology (ICT) can reduce the environmental impact of ICT and non-ICT processes. The workshop will provide a forum for discussions on methods to reduce the environmental impact of ICT systems, networks and applications. The workshop will also provide an opportunity to explore how ICT applications or services can reduce the environmental impact of existing non-ICT processes (e.g., quantify the reduction in carbon emissions from using tele-presence services instead of travel).

This workshop is intended to bring together researchers from the (traditional) SIGMETRICS community with researchers and practitioners in relevant areas, to exchange technical ideas and experiences on how to lessen the environmental impact of ICT. Improvements should be quantified in terms of *sustainability metrics* such as reductions in carbon emissions and Total Cost of Ownership (TCO). Improvements in sustainability should ideally also demonstrate that acceptable Service Level Agreements (SLAs) can be maintained. This workshop will serve as a forum for the SIGMETRICS community to apply general measurement, analysis and modeling techniques to this important area.

Topics of interest include but are not limited to:

- Measurement and evaluation of the sustainability of existing ICT systems
- Definition and demonstration of useful sustainability metrics
- Methods that systematically improve the efficiency of existing ICT systems
- Tools that facilitate the design of more sustainable ICT systems
- Development of models that pertain to the sustainability of ICT systems
- Case studies of efforts to improve the sustainability of production ICT systems
- Use of ICT systems to improve the sustainability of existing non-ICT processes
- Software engineering for systematically improving the sustainability of ICT systems

In all of the above topics, “ICT systems” includes applications and services supported by ICT infrastructure. We believe that it is important to provide a medium for researchers and organizations to share insights and lessons learned as steps are taken towards improving sustainability, and strongly encourage submissions presenting research involving large-scale ICT systems such as entire data centers or enterprise-scale applications.

An award will be presented for the best student paper.

Important Dates

Monday May 3, 2010: Paper Submission (hard deadline)

Monday May 17, 2010: Author Notification

Monday May 31, 2010: Final Versions Due

Monday June 14, 2010: Workshop

Submission Guidelines

Papers must not exceed five double-column pages in the standard ACM format (<http://www.acm.org/sigs/publications/proceedings-templates>). Submissions must be submitted electronically in printable PDF form, via the EDAS system (<http://www.edas.info/>). The EDAS system requires you to register the title and abstract of your paper before you can upload the manuscript of the paper. The deadline for the final version

of submissions is May 3, 2010, 23:59 EST. Submissions will be reviewed by the GreenMetrics program committee, from which a number of papers will be selected for presentation at the workshop. The accepted papers will be published in the March 2011 issue of ACM SIGMETRICS Performance Evaluation Review (PER). Authors of accepted papers grant permission to ACM to publish the paper in PER and the ACM digital library. Authors do retain the copyright of their paper.

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