ACM SIGCOMM Global Access to the Internet for All (GAIA) Workshop

Call for papers

The Internet is now an all powerful medium - information has become pervasive, the entire digital economy relies on the Internet, new models for e-governance have emerged, and it runs the ever growing social networking platform which can even change governments.

On one end, we have the developed world where access is getting faster and services being developed to utilize faster access. On the other end, there are people who do not have access to the Internet at all. Some may not be able to get it due to lack of infrastructure support (which accounts to the notion of the digital divide problem faced by most people in developed countries). There have been significant initiatives to solve the problem of affordable infrastructure. Crucially, most of these approaches address infrastructural barriers without addressing economic ones. This problem can also be seen in developed countries where many individuals find themselves unable to pass a necessary credit check, or living in circumstances that are too unstable to commit to lengthy broadband contracts. Digital inclusion is important for social equality to ensure access to the many benefits the Internet offers.

This workshop addresses the problem of digital exclusion through networking technology. It will address a range of research questions (feasibility, scalability, security, new privacy challenges, robustness, resource allocation, sustainability, performance etc.). It will create awareness on the technological solutions to digital exclusion and will help the research community to explore the above-mentioned challenges, understand requirements, the potential and the limits of solutions that have been proposed to address in this space. The workshop will overview the state of the art, detect gaps and determine a research roadmap to bridge these gaps.

Topics of particular interest include, but are not limited to:

- 1. Do-it-yourself (DIY) networking (such as community networks) for the developing world
- 2. Cost-efficient networked systems appropriate for use in underdeveloped areas
- 3. Fault-tolerant resilient networking technologies for the developing world
- 4. Rural/remote area wireless solutions (that can work efficiently with resource constraints such as intermittent and unreliable access to power/ networking service)
- 5. Simplified network management techniques (including support for heterogeneous service delivery through multiple
- 6. Using cognitive radio technology and 5G standards (with possible native integration of satellites) for GAIA
- 7. Techno-economic issues related to development (including development of flexible pricing and incentive structures as well as new spectrum access models for wireless)
- 8. Techno-political and cultural issues related to using communications for development
- 9. Using emerging networking architectures and future Internet architectures [e.g., cloud computing, fog computing, network functions virtualization (NFV), information-centric networking (ICN), software-defined networking (SDN), and delay-tolerant networking (DTN)] for development.
- 10. Using wireless access/ distribution technologies (such as the following) for development: TV white spaces (TVWS); satellite communications using advances in geostationary orbit (GEO) and low-earth orbit (LEO) satellites; low-cost community networks; cellular technologies (such as CDMA 450, the open-source OpenBTS, etc.); wireless mesh and sensor networks; Wi-Fi-Based Long-distance (WiLD) networks; and wireless based wireless regional access networks
- 11. Measurements of infrastructures in developing regions.
- 12. Understanding Internet censorship and solutions to circumvent censorship.

Workshop Chairs

Arjuna Sathiaseelan, Computer Laboratory, Cambridge University, UK Jörg Ott, Technische Universität München, Germany

Technical Program Committee

- Aaditeshwar Seth, IIT Delhi, India
 Adam Wolisz, TUB, Germany
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- 13. Jay Chen, New York University, UAE
- 14. Jon Crowcroft, Computer Laboratory, Cambridge University, UK
- 15. Kannan Govindan, Samsung Research, India
- 16. Lakshmi Subramanian, New York University, USA
- 17. Leandro Navarro, UPC Barcelona, Spain
- 18. Lisandro Zambenedetti Granville, UFRGS, Brazil

- 19. Maneesha V Ramesh, Amrita Institute, India
- 20. Marco Zennaro, ICTP, Italy
- 21. Michael Welzl, Oslo University, Norway
- 22. Nabil Benemar, Morocco
- 23. Narseo Vallina Rodriguez, ICSI, Berkeley, USA
- 24. Nick Feamster, Princeton University, USA
- 25. Nishanth Sastry, Kings College London, UK
- 26. Pan Hui, HKUST, Hong Kong
- 27. Saleem Bhatti, University of St. Andrews, UK
- 28. Scott Burleigh, JPL, NASA, USA
- 29. Teemu Kärkkäinen, Technische Universität München, Germany
- 30. Tristan Henderson, University of St. Andrews, UK
- 31. Veljko Pejovic, University of Ljubljana, Slovenia
- 32. Yiannis Psaras, UCL, UK

Submission

ACM SIGCOMM GAIA Workshop will consider only original **papers** that are not currently under review by other workshops, conferences, or journals, and have not been published. All papers submitted will be peer-reviewed (single-blind) and evaluated based on their suitability (i.e., within the workshop scope), novelty, and merit. Submitted papers are limited to 6 pages and should be submitted as a PDF file, including all figures and references.

All submissions should be formatted in standard ACM conference style for publication in the conference proceedings. They must be single-spaced, double-column, with each column 9.25" by 3.33", 0.33" space between columns, use at least a 10pt font, and be correctly formatted to be printed on letter-sized (8.5" by 11") paper. It is required that at least one author of each accepted paper register and attend the ACM SIGCOMM GAIA workshop to present their work to ensure its publication in the ACM SIGCOMM conference proceedings.

To submit your paper to ACM SIGCOMM GAIA Workshop, please visit the submission website.

Important Dates

Paper registration deadline: March 11, 2016 Paper submission deadline: March 18, 2016 Paper acceptance notification: April 29, 2016 Camera-ready deadline: Late May, 2016