

**Call for Papers**  
**Green Computing, Networking, and Communications Symposium (GCNC),**  
**ICNC 2017**

Silicon Valley, January 26-29, 2017

<http://www.conf-icnc.org/2017>

**Symposium Co-Chairs**

Yaling Yang, Virginia Tech, USA; email: [yyang8@vt.edu](mailto:yyang8@vt.edu)

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**Scope**

Green computing has been one of the important topics of research in recent years due to its potential economic and environmental impact. Recent studies have shown that ICT and computing resources account for 2% -- 10% of the world's power consumption, and is quickly growing due to the ever-increasing proliferation of electronic devices.

To reduce the carbon-footprint and improve the environmental sustainability, novel paradigms, methods, techniques, and systems are needed to develop green computing and communication technologies, with focus on high-energy efficiency, lowering the dependence on energy sources that lead to greenhouse gas emissions, better re-use of resources and materials, and the use of renewable energy resources.

The ICNC Green Computing, Networking, and Communications Symposium aims at bringing together researchers and visionaries from academia, research laboratories, and industries working towards the ultimate goal of green ICT. To this end, this symposium solicits original theoretical, experimental, and design approaches that can cope with this paradigm shift towards green computing. The symposium also solicits the application of computing, communications, and networking technologies towards the development of sustainable energy systems that may include modernization of the electric power grid and the integration of distributed energy resources. Topics of particular interest include, but are not limited to the following.

- Green computing models, simulations, designs, and paradigms
- Green ICT operation with renewable energy
- Green materials and devices
- Green high-performance computing and applications
- Cross-layer optimization of green networking infrastructures
- Energy-aware software-defined network
- Energy-aware algorithms and protocols
- Energy harvesting based communications, computing, and control
- Ambient energy harvesting, models, prediction, storage, and recycling
- Energy-efficient networking and computing infrastructures
- Energy-efficient multimedia systems
- Energy-efficient data center and cloud technologies
- Life-cycle analysis of communication and computing equipment, especially with energy harvesting
- Climate and ecosystem monitoring

- Integration of distributed energy resources and EVs utilizing ICT
- Design, analysis, and realization of smart grid
- Applications of energy efficient systems such as green Body Area Networks
- Implementations, test-beds and experimental results for green communications and computing
- Quality-of-service provisioning in green ICT

### **Submission Guidelines**

Author instructions: <http://www.conf-icnc.org/2017/author.htm>

Direct paper submission link: <https://edas.info/N22334>

Paper Submission: 5 July 2016

Acceptance Notification: 20 Sept. 2016

Camera-ready Paper: 20 Oct. 2016

Conference: 2-5 February 2017

### **Short Biography of Co-Chairs**

Dr. Yaling Yang is currently an associate professor in the Electrical and Computer Engineering department of Virginia Tech. She received her doctorate in computer science in the summer of 2006 from the University of Illinois at Urbana-Champaign. She has concentrated her research on design, modeling and analysis of networking systems and security systems. She is the faculty fellow of Virginia Tech's engineering school and an NSF Faculty Early Career Award winner. She has been the principle investigator of eight NSF funded projects. Her research website can be found at <http://www.ece.vt.edu/yyang8>.

Dr. Duc A. Tran is an Associate Professor of Computer Science at UMass Boston, where he is Director of the Network Information Systems Laboratory (NISLab). His research interests are networks and distributed data, with current focus on fast and efficient techniques targeting social, sensing, storage, and search applications. He has received several research funding awards from the National Science Foundation, Best Paper Recognition at IEEE MASS 2014, ICCCN 2008, and DaWak 1999. Dr. Tran has served as a frequent Review Panelist for the National Science Foundation, Editor for Elsevier Ad Hoc Networks Journal (2015-date), Editor for Springer Journal on Computational Social Networks (2013-date), Editor for Taylor Francis Journal on Parallel, Emergent, and Distributed Systems (2010-date), Guest-Editor for the Journal on Pervasive Computing and Communications (2009), TPC Symposium Co-Chair for ICNC 2017, TPC Track Chair for VTC Fall 2015, TPC Vice-Chair for AINA 2007, and Member of Organizing Committee for IEEE DCOSS 2016 and ACM Multimedia 2014. He was a keynote speaker at WiMAN 2013. Dr. Tran obtained a PhD degree in Computer Science from the University of Central Florida in 2003.