

CALL FOR PAPERS

The 2nd International Workshop on ADVANCES in NATURE-INSPIRED AUTONOMIC COMPUTING and NETWORKING (ANIACN 2014) in Conjunction with The 6th Asian Conference on Intelligent Information and Database Systems (ACIIDS 2014)

Time: April 7 - 9, 2014 Bangkok, Thailand

Website: <http://www.ic.kmitl.ac.th/aciids2014/index.html>

To be published in **ACIIDS 2014 LNCS/LNAI** and **Mobile Networks and Applications (MONET) Journal (SCI-E)** by Springer.

INTRODUCTION

A new computing and networking paradigm is currently undergoing rapid advancements and emerging on the spot as one of the priority research areas: nature-inspired autonomic computing and networking (NIACN). In fact, research activities on NIACN are recently booming, marked by the increasing developments of NIACN applications. NIACN is characterized by its self-* facets such as self-organization, self-configuration, self-healing, self-optimization, self-protection and so on whose context-awareness used to dynamically control computing functions. The overarching goal of NIACN is to realize nature-inspired computing and networking systems (so-called autonomic systems), that can manage themselves without direct human interventions. Meeting this grand challenge of NIACN requires a rigorous interdisciplinary approach to nature-inspired computing and networking systems. To this end, in this invited session, we will present and discuss advances in NIACN through dissecting nature-inspired computing and networking systems taking advantage of formal engineering methods. Furthermore, in the field of NIACN, there exists a need for novel research results on properties of nature-inspired computing and networking systems. All of these are to achieve firm formal foundations of NIACN.

GOAL

This invited session on ADVANCES in NATURE-INSPIRED AUTONOMIC COMPUTING and NETWORKING (ANIACN 2014) in conjunction with the ACIIDS 2014 conference is a place for highly original ideas about how NIACN is going to shape computing and networking systems of the future. Hence, it focuses on rigorous approaches and cutting-edge solutions which break new ground in dealing with the properties of nature-inspired computing and networking systems. Its purpose is to make a academic forum more accessible to researchers, scientists, professionals and graduate students as well as developers and practitioners in computing science, especially in the area of computational intelligence by providing them with state-of-the-art research results and future opportunities and trends.

TARGET PARTICIPANTS

This session is organized for researchers, scientists, professionals and graduate students in computing science, especially in the area of computational intelligence as well as developers and practitioners in intelligent computing and networking systems design.

SCOPE

Original papers are solicited for this session. In particular, theoretical contributions should be formally stated and justified, and practical applications should be based on their firm formal basis. Suggested

topics include, but are not limited to, the following:

- * Formal Methods for autonomic systems
- * Architectures for autonomic systems
- * Modeling autonomic systems
- * Software architectures for autonomic systems
- * Resource sharing in autonomic networking
- * Autonomic middleware
- * Self-optimization and self-awareness
- * Autonomic grid systems
- * Security and privacy in autonomic systems
- * Integration models and protocols in autonomic systems
- * Socially or biologically inspired autonomic systems
- * Autonomic communications
- * Cognitive radio networks
- * Autonomic pervasive systems
- * Swarm intelligence in autonomic systems
- * Autonomic models and systems for ad hoc networks
- * Autonomic systems test-beds
- * Autonomic pervasive systems
- * Autonomic cognitive networks
- * Autonomic storage and caching systems
- * Performance analysis of autonomic systems
- * Agents for autonomic systems
- * Autonomic peer-to-peer systems
- * Autonomic architecture for sensor systems
- * Dynamic spectrum access
- * Self-healing and self-protection in autonomic systems
- * Active and programmable networks

SUBMISSION PROCEDURE

Prospective authors may check the Guidelines for Authors of LNCS/LNAI at <http://www.ic.kmitl.ac.th/aciids2014/index.html>. Submitted papers must not have been previously published or be currently under consideration for publication elsewhere.

All papers will be rigorously refereed. Complete papers in PDF format should be submitted to <https://www.easychair.org/conferences/?conf=aniacn2014> within October 15, 2013. If a paper has co-authors then a correspondence contact out of co-authors must be indicated.

IMPORTANT DATES

Due date of initial submission: ~~October 15, 2013~~ **October 30, 2013**

Notification of the submission : **December 15, 2013**

Due date of camera-ready paper submission: **January 15, 2014**

ORGANIZER

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