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Proceedings of the Work in Progress Session

held in connection with the

**25th EUROMICRO International Conference on
Parallel, Distributed and Network-based Processing
PDP 2017**

St. Petersburg, March 6 – 8, 2017

edited by Erwin Grosspietsch and Konrad Klöckner

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Preface

The 25th EUROMICRO International Conference on Parallel, Distributed and Network-based Processing PDP 2017 has organized a Special Session to present work in progress aimed to authors that have not yet attained final and complete results in their research.

According to the theme spectrum of the PDP 2017 conference, topics of interest for the Work in Progress session include

- Distributed Systems: distributed databases, distributed object-oriented systems, distributed operating systems, heterogeneous distributed systems, distributed algorithms, distributed shared memory systems.
- Network-based Computing: web computing, cluster computing, computational grids, data grids, semantic grid, mobile agents, distributed web services, security in distributed systems.
- Parallel Computer Systems: massively parallel machines, interconnection networks, embedded parallel and distributed systems, fault-tolerance, memory organization, support for parallel I/O.
- Models and Tools for Parallel Programming Environments: performance prediction and analysis, simulation, knowledge-based parallel program development, visualization tools.
- Advanced Applications: multi-disciplinary applications, parallel databases, computations over irregular domains, numerical applications with multi-level parallelism, real time distributed applications, distributed business applications.
- Languages, Compilers and Runtime Support Systems: task and data parallel languages, functional and logic languages, object-oriented languages, dependability issues, scheduling and load balancing, task and object migration.

We have selected 6 contributions, coming from authors from six countries. Each of these contributions consists of a short presentation in the session and an extended abstract gathered in this proceedings volume.

We thank the Johannes Kepler University of Linz, Austria for providing the publication of this volume and all organizers of the PDP conference event for supporting the holding of the session.

Sankt Augustin, February 2017

Erwin Grosspietsch, Konrad Klöckner
Session Co-Chairs

Programme

Szilvia Varadi, Attila Kertesz

The Legal Side of IoT Cloud Systems

Shinji Sumimoto, Yuichiro Ajima, Takafumi Nose, Kazushige Saga, Naoyuki Shida; Morie Yoshiyuki, Takeshi Nanri

Parallel Application Experiences Using Advanced Communication Primitives

Siavash Ghiasvand, Florina M. Ciorba

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Rika Ito, Naoyuki Fujita

An Experimental Detection for Hardware Failure Using Big Data Analysis

Mirosław Blocho, Jakub Nalepa

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Emanuelle Torti, Alessandro Fontanella, Giovanni Danese, Francesco Leporati

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Gennaro Cordasco; Renato De Donato, Delfina Malandrino, Pina Palmieri, Andrea Petta, Donato Pirozzi, Vittorio Scarano, Luigi Serra, Carmine Spagnuolo, Luca Vicidomini

A Scalable Data Web Visualization Architecture