20th Conference

RECONFIGURABLE UBIQUITOUS COMPUTING

RUC'2017

Szczecin, 25 May, 2017

THURSDAY, 25th May, 2017

9:00 – 9:15 Conference Opening

9:15 – 10:45 SECTION: Methods and Tools

Chairman: Aleksandr Cariow

1. *Dominik Sondej, Ryszard Szplet*
Military University of Technology
Estimation of Quantization Steps of Time Interpolator in View of Temperature Changes

2. *Tomasz Kossowski, Karolina Kossowska, Ryszard Stasiński*
Poznan University of Technology
Non-Invasive Measurement of Chemical Compounds Levels in Human Body

3. *Valery Salauyou, Michal Ostapczuk*
Bialystok University of Technology
Finite-State State Machines Minimization By Using of Values of Input Variables At State Assignment

4. *Przemysław Gąsior, Adam Bondyra, Stanisław Gardecki*
Poznań Aerial Robotics Team, Institute of Control And Information Engineering, Poznań University of Technology
Comparison of Different Methods of Flight Data Logging Used in Multirotor UAVs

5. *Teodora Dimitrova-Grekow, Valery Salauyou, Karol Kowalski*
Bialystok University of Technology
Indoor Mapping Using Sonar Sensor And Otsu Method

6. *Julia Kosowska, Grzegorz Mazur*
Institute of Computer Science, Warsaw University of Technology
Software-Defined Computer With A Classic Microprocessor

10:45 – 11:15 Coffee Break

11:15 – 12:45 SECTION: Hardware Acceleration

Chairman: Salauyou Valery

1. *Michał Fularz, Dominik Pieczyński, Marek Kraft*
Poznan University of Technology, Faculty of Electrical Engineering, Institute of Control And Information Engineering
The Performance Comparison of The Dma Subsystem of The Zynq Soc in Bare Metal And Linux Applications

2. *Marek Kraft, Michał Olejniczak, Michał Fularz*
Poznan University of Technology, Faculty of Electrical Engineering, Institute of Control And Information Engineering
A Flexible, High Performance Hardware Implementation of The Simplified Histogram of Oriented Gradients Descriptor

3. *Aleksandr Cariow [1], Galina Cariowa [1], Marina Chicheva [2]*
[1.] West Pomieranian University of Technology, Szczecin, [2.] Samara State Aerospace University
Hardware-Efficient Schemes of Quaternion Multiplying Units For 2d Discrete Quaternion Fourier Transform Processors

4. *Aleksandr Cariow, Galina Cariowa*
West Pomieranian University of Technology, Szczecin
Some Schemes For Implementation of Arithmetic Operations With Complex Numbers Using Squaring Units

5. *Aleksandr Cariow, Galina Cariowa*
West Pomieranian University of Technology, Szczecin
A Hardware-Efficient Structure of Complex Numbers Divider

6. *Mariusz Kapruziak*
West Pomieranian University of Technology, Szczecin
Dynamic Quantization Algorithm for software radio FSK Receiver in FPGA

7. *Łukasz Korduła, Maciej Wielgosz, Michał Karwatowski, Marcin Pietroń, Dominik Żurek, Kazimierz Wiatr*
AGH University of Science And Technology
Assessment of GPU Acceleration Strategies in Text Categorization Processing Flow

12:45 – 13:30 Lunch

13:30 – 15:00 SECTION: Applications

Chairman: Mirosław Łazoryszczak

1. *Przemysław Aszkowski, Krzysztof Błoszyk, Adam Bondyra, Przemysław Gąsior, Wojciech Giernacki*
Institute of Control And Information Engineering, Poznań University of Technology
UAV Propulsion Analysis System With Reconfigurable Controller Feature

2. *Mateusz Buczkowski*
Poznan University of Technology
Measuring The Effective Coverage of The Image Databases

3. *Sławomir Jaszczak, Piotr Nikończuk*
West Pomeranian University of Technology in Szczecin, Department of Computer Science
West Pomeranian University of Technology in Szczecin, Department of Maritime Technology And Transport
Supervisory System of Integrated Spray Booths

4. *Kamil Gasik, Ryszard Szplet*
Military University of Technology
Direct Digital Synthesizer Based On Field Programmable Gate Array

5. *Krzysztof Sieczkowski, Tadeusz Sondej*
Electronic Department, Military University of Technology Them. Jaroslaw Dabrowski
The Use of A Raspberry Pi Single-Board Computer For Image Acquisition And Transmission

6. *Andrzej Wojenski [1], Krzysztof T. Pozniak [1], Didier Mazon [2], Maryna Chernyshova [3]*
[1] Warsaw University of Technology, Institute of Electronic Systems, [2] Cea, Irfm F-13108 Saint-Paul-Lez-Durance, France, [3] Institute of Plasma Physics and Laser Microfusion
Trigger Link Training And Diagnostics For The Soft X-Ray Plasma Radiation Measurements

7. *Wiktor Woźniak, Piotr Stołowski, Łukasz Matuszewski, Mieczysław Jessa*
Politechnika Poznańska, Wydział Elektroniki I Telekomunikacji
Measurement Data Acquisition System With Mobile Server

15:30 – 22:00 Binowo Park Golf Club (Binowo 62, Stare Czarnowo)

    15:30 – 16:30 Golf Training Course
    16:30 – 18:30 Tournament on the 9-hole golf course
    18:30 – 22:00 Banquet