

AMWAS 2008 - Programme

Autumn School

October 7th

8.15: Registration

8.45: Welcome and Introduction (Coordinators: Christian / Philippe)

9.00: Keynote 1: TBD

Software aspects: Toolchain and System Software

10.00: Talk 1: AETHER: μ threaded run-time environment for adaptive programming, Chris Jesshope

11.30: Coffee Break

12.00: Talk 2: MORPHEUS: MORPHEUS Global Toolset overview, Philippe Millet, Thales, France

13.30: Lunch Break

14.45: Talk 3: AETHER SP3 The S-NET Environment, Clemens Grellck, University of Hertfordshire

16.30: Coffee Break

Exploitation of reconfigurability and Chip Design: The hardware aspects

17.00: Talk 4: Implementation of heterogeneous multi-core processors, Fabio Campi, ST, Italy

18.30: Closing

October 8th

8.30: Talk 5: AETHER SP1 Design of adaptive hardware using run-time reconfigurable devices, Jean-Marc Philippe, CEA LIST, Martin Danek, UTIA

10.00: Coffee Break

10.30: Talk 6: MORPHEUS: Application Scenarios in MORPHEUS, Sean Whitty, Henning Sahlbach, TU Braunschweig, Germany and Cyrille Batarriere, Thales, France

12.00: End of AMWAS 08 School: Final comments (Coordinators)

Workshop

October 8th

12.00: Lunch Break

13.30: Keynote 2: TBD

14.30: Session1 - MODEL ENVIRONMENT FOR SELF-ADAPTIVE SYSTEMS

Spatial design backend: CDFG mapping on eFPGA and DREAM IPs

Loic Lagadec and Damien Picard (University of Brest, France)

On Simulating Operating Environment Decisions in a SANE Network

Milad El Khodary¹, Jean-Philippe Diguët¹, Guy Gogniat¹, Fabrice Muller² and Michel Auguin²

¹ LabSTICC, Université de Bretagne-Sud, UEB - CNRS, Lorient, France

² LEAT, Université de Nice-Sophia Antipolis - CNRS, Valbonne, France

S-Net Type System and Operational Semantics

Haoxuan Cai¹, Susan Eisenbach¹, Clemens Grellck^{2,3},

Frank Penczek³, Sven-Bodo Scholz³ and Alex Shafarenko³

¹ Dept of Computing, Imperial College London, UK

² Informatics Institute, University of Amsterdam, Netherlands

³ Dept of Computer Science, University of Hertfordshire, UK

15.45: Coffee Break

16.00: Session 2 - ARCHITECTURE ISSUES FOR SELF-ADAPTATION

Heterogeneous Multi-Core Architecture: The Added value of Physical Design

Fabio Campi, STMicroelectronics, Italy

LOW-LEVEL DESIGN OF A SELF-ADAPTIVE SYSTEM

Javier Soto, J. Manuel Moreno, Jordi Madrenas, Joan Cabestany, UPC, Spain

Evaluating flexible CGRA cells

Giovanni Ansaloni, Paolo Bonzini, Laura Pozzi, University of Lugano, Faculty of Informatics, Lugano, Switzerland

17.15: Coffee Break

17.30: Round Table / Panel : Preparing AETHER and MORPHEUS aftermath: what research and project shall we propose ?

18.30: Closing of day 1

19.00: Social Event?

October 9th

9.00: Session 4: PRACTICAL HW AND APPLICATION ISSUES

Self-Adaptive Computing Networked Entities for DSP: Evaluation of One Possible Implementation

Jiri Kadlec, Martin Danek, Roman Bartosinski, Lukas Kohout
UTIA AV CR, v.v.i., Pod Vodarenskou vezi 4, Praha 8, Czech Republic

Enabling Self-adaptivity at Application Level

Onur Derin, Alberto Ferrante, ALaRI, Faculty of Informatics, University of Lugano, Lugano, Switzerland

Mapping of a Film Grain Removal Algorithm to a Heterogeneous Reconfigurable Architecture

Sean Whitty, Henning Sahlbach, Rolf Ernst, Technical University of Braunschweig, Germany
Wolfram Putzke-Röming, Deutsche Thomson OHG, Germany

10.15: Coffee Break

10.40: Session 5: SYSTEMS CONCEPTS

Embedding Self-Adaptivity in Future Computing Devices using the SANE Concept: Model, Implementation on Reconfigurable Hardware and Example Application

Jean-Marc Philippe, Benoît Tain, Christian Gamrat, CEA, LIST, France

Dynamic Reconfiguration of Nano Architectures using Application Independent Fault Detection

Mahtab Niknahad, Christian Schuck, Michael Hübner, Jürgen Becker, Universität Karlsruhe (TH), Germany

A Guarantee of Service Protocol for Pervasive Distributed Systems

Alberto Ferrante, Roberto Pompei, Anastasia Stulova,
Antonio Vincenzo Taddeo, ALaRI, Faculty of Informatics, University of Lugano, Lugano, Switzerland

12.00: Lunch Break

14.00: Session 6: Run-Time Reconfiguration

Running S-Nets on Shared Memory Multicore Systems

Clemens Grelck^{1,2} and Frank Penczek¹

¹ University of Hertfordshire

Department of Computer Science, United Kingdom

² University of Amsterdam

Institute of Informatics, Amsterdam, Netherlands

Towards Reconfiguration and Self-Adaptivity in S-Net

Frank Penczek¹, Sven-Bodo Scholz¹, Clemens Greck^{1,2}

¹ University of Hertfordshire

Department of Computer Science, United Kingdom

² University of Amsterdam

Institute of Informatics, Amsterdam, Netherlands

Graph Walker: Implementing S-Net on the Self-adaptive Virtual Processor

K. Bousias, C. R. Jesshope, Institute for Informatics, University of Amsterdam
The Netherlands

J. Thiyagalingam, S. Scholz, A. Shafarenko, Department of Computer Science
University of Hertfordshire, United Kingdom

15.15: Coffe Break

15.30: Closing Session: Final remarks: what's next (coordinators of AETHER and MORPHEUS)

16.00 End of AMWAS'08