

On behalf of the organizing committee, it is our pleasure to welcome you to the IEEE Workshop on Evolvable and Adaptive Hardware (WEAH 07) at the 2007 IEEE Symposium Series on Computational Intelligence. Many impressive achievements have been logged since “Evolvable Hardware” emerged as a named discipline a little over ten years ago. However, to date, most activity in the field still focuses on niche applications or proofs-of-concept. Certainly, such focus is vital in the formative stages of a new discipline. However, to advance beyond the status of “intriguing curiosity”, the focus has to move to solving problems and identifying opportunities common across all individual efforts.

In this spirit, WEAH is an attempt to find commonalities. What problems do we all face? How do we fix them and what can we learn from that effort? In general, when and why should evolvable and adaptive hardware be used to solve a problem? Proofs-of-concept demonstrate efficacy in specific cases, but how do we convince a potentially skeptical engineering community that EAH constitutes an efficacious, safe, and economical alternative to traditional approaches? The call for papers requested articles that addressed these sorts of questions. The papers are valuable, but perhaps less for their content than for the frame of mind into which they hopefully nudged their authors. The most valuable work of this workshop will assuredly occur in the panel sessions and the conversations around the coffee tables. Almost by definition, none of the proffered questions can be solved in isolation. The organizing committee sincerely hopes that this relatively rare opportunity for open, unrestrained, discussion of big issues is not wasted. We invite and encourage every author, guest, and attendee not only to participate, but also to ask hard questions and begin to hammer out provisional answers. If we do not frame the questions, the rest of the world will certainly do so for us. It serves no one in the field to be unready for that eventuality.

Garrison W. Greenwood  
Portland State University  
General Co-Chair

John C. Gallagher  
Wright State University  
General Co-Chair

**Organizing Committee:**

Garrison Greenwood, Portland State University (General Co-chair)  
John Gallagher, Wright State University (General Co-chair)  
Andrew Tyrrell, University of York  
Pauline Haddow, Norwegian Univ. of Science & Technology  
Xin Yao, University of Birmingham  
Jason Lohn, NASA  
Ed Ramsden, Williams Controls

**Program Committee:**

Burcin Aktan, Intel  
Hugo deGaris, Wuhan University  
Hai-Bin Duan, Nanjing University  
Maynard Falconer, Intel  
David Gwaltney, NASA  
JingSong He, University of Science & Technology of China  
James Hereford, Murray State University  
Arturo Hernandez-Aguirre, CIMAT  
Didier Keymeulen, NASA  
Greg Larchev, NASA  
Yong Liu, University of Aizu  
Lukas Sekanina, Brno University of Technology  
Giovanni Squillero, Politecnico Di Torino  
Adrian Stoica, NASA  
Gianluca Tempesti, University of York  
Rich Terrile, NASA  
Ricardo Zebulum, NASA