



# Welcome to the NCSA/IlliGAL Gathering on Evolutionary Learning (NIGEL 2006)

Xavier Llorà

*Automated Learning Group & Illinois Genetic Algorithms Lab  
National Center for Supercomputing Applications  
University of Illinois at Urbana-Champaign*

`xllora@uiuc.edu`



# A Little Tale

- LCS Gettogether in November 2003 at Ann Arbor.
  - John Holland, David Goldberg, Stewart Wilson, Stephanie Forrest, Lashon Booker, Rick Riolo, Pier Luca Lanzi, Martin Butz, and Xavier Llorà.
  - Discussed current trends and new directions.
  - Primordial soup of ideas and new challenges.
- January 2006.

Friday's coffee after the usual IlliGAL lunch meeting.

  - People discussing.
  - Talking to Dave Goldberg about GA related topic.
  - A question out of the blue:  
*“Have you thought on having another LCS gathering?”*



# An Unexpected Question

- I was off balance. No answer.
- Then the conversation move to other topics.
- After the coffee I slowly recalled the 2003 Gettogether.
- A retrospective look shows an irrefutable footprint in the LCS/GBML research community.
  - One example:
    - Stewart Wilson proposed “*The frog problem*”.
    - The problem became the seed of a still blossoming amount of papers on function approximation using LCS (see GECCO and IWLCS).
  - Some issues discussed are still at bay waiting to sail (encapsulation, the role of linguistics...) despite of interesting attempts have been done.



## Why Not?

- I convinced myself about the usefulness of doing it again.
- I started contacting people with no much hope to bring a small group together.
- The feedback I made me think that may there was hope.
- So, off I went, and finally I was able to answer Dave's January question on February.
- And the answer was: "*Why Not?*".
- At least, it will be fun for sure :D



# Thank You!

- Thanks to all of you for coming all the way here!
- Thanks to Dave Goldberg for asking the right question, for encouraging me to set NIGEL up, for supporting NIGEL, and for his priceless advises and lessons.
- Thanks to all IlliGAL lobbies for taking care of precious details.
- Thanks to Michael Welge and the Automated Learning Group at NCSA for their support and trust.
- Thanks to NCSA for opening their doors and facilities to us.



# A Few Announcements & Logistics

- NIGEL is going to be held in room 1030 at NCSA.
- Coffee breaks will be held outside.
- Internet access:
  - At IlliGAL (414 Transportation Building). Please see maps.
  - We have few cards to allow you inside.
  - Wireless access to the UIUCnet across campus (please visit IlliGAL for instructions).
- Moving around:
  - Maps on how to get to IlliGAL.
  - Campus map.



# A Glance to the Agenda (I/III)

- **Tuesday, May 16** (*open to public presentations and discussions*)
  - 8:30 am Welcome and presentation
  - 9:00 am **Public presentations:**
    - Stewart W. Wilson: "Can We Do Captchas?".
    - David E. Goldberg: "Searle, Intentionality, and the Future of Classifier Systems".
    - Dipankar Dasgupta: "Artificial Immune Systems in Anomaly Detection".
    - Lashon Booker: "A Retrospective Look at Classifier System Research".
  - 10:30 am *Break*
  - 10:45 am **Public presentations:**
    - Martin Butz: "XCS: Current Capabilities and Future Challenges".
    - Alwyn Barry: "Towards a Formal Framework for Accuracy-based LCS".
    - Xavier Llorà: "Linkage Learning for Pittsburgh Learning Classifier Systems: Making Problems Tractable".
    - Jorge Casillas: "Scalability in GBML, Accuracy-Based Michigan Fuzzy LCS, and New Trends".
  - 12:15 pm *Lunch*



# A Glance to the Agenda (II/III)

- **Tuesday, May 16** (*open to public presentations and discussions*)
  - **1:50 pm Public presentations:**
    - Ester Bernadó: "Learning Classifier Systems for Unbalanced Datasets"
    - Pier-Luca Lanzi: "Computed Prediction: so far, so good. Now what?"
    - Jaume Bacardit: "Pittsburgh Learning Classifier Systems for Protein Structure Prediction: Scalability and Explanatory Power"
  - 3:20 pm *Break*
  - 3:30 pm Review of hot topics and round table
  - 4:30 pm *Break*
  - 4:40 pm Review of the goals of the Wednesday workshops
  - 5:00 pm *Break*
  - 7:00 pm Private reception (Party at Goldberg's house).  
**Invitation only.**



# A Glance to the Agenda (III/III)

- **Tuesday, May 17** (*closed workshops; topics may be modified*)
  - 8:30 am **Why are we doing this?**
    - Moderator and brainstorm facilitator: David E. Goldberg
  - 10:30 am *Break*
  - 10:45 am **Applications: Gaining visibility via something nobody else can do?**
    - Moderator: Pier-Luca Lanzi
  - 12:15 pm *Lunch (provided)*
  - 1:50 pm **Techniques: Where should we concentrate our efforts to maximize the impact and visibility of LCS/GBML?**
    - Moderator: Martin Butz
  - 3:20 pm *Break*
  - 3:30 pm **Review of hot topics and round table**
  - 3:30 pm *Break*
  - 4:40 pm ***Thanks and good-bye!***



Enough Talking. Let's Get Some Action!

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