



Soar Usage in the UK & Europe

A. Kalus

University of Portsmouth

and

DERA (Portsmouth West)

England

UK

kalusa@sis.port.ac.uk



The EU-Soar Mailing List

- ❑ 26 people on the EURO-SOAR mailing list.
- ❑ Breaks down as:
 - UK - 9
 - Netherlands - 6
 - France - 3
 - Germany - 2
 - 1 each from Denmark, Spain, Italy,
Argentina, Brazil, Canada.
 - (and 1 from Sweden, who isn't on the mailing list)



Replies to Questionnaire

- Only 5 replies received from a short questionnaire sent out to the EU-SOAR list.
 - 2 from the UK,
 - 1 from Germany
 - 1 from the Netherlands
 - (and 1 from Sweden)



Germany

□ Location:

University of Freiburg

□ Work:

Not current. Sched-Soar 1992/3.

□ Development environment:

Soar 5 and Soar 6

□ Web Page:

<http://www.psychologie.uni-freiburg.de/signatures/nerb/#publikation>



Netherlands

Location:

University of Groningen

Work:

Looking at organizations as multi-agent systems; emergent properties of agent interaction.

Development environment :

IBM rs6000, Soar-7.0.0beta

Web Page:

<http://www.bdk.rug.nl/~vdbroek>



Sweden

- **Location:**

 - University Erasmus/Stockholm

- **Work:**

 - To simulate social phenomena that arise when cognitive agents work together.

- **Development environment :**

 - Sun Sparc 5, Solaris, Soar-7.0.4

 - Powerbook 180, System 7.5.3, Soar-7.0.4



University Based -1

□ Location:

University of Nottingham: Frank Ritter's group

□ Work:

- For creating models - The TSI
- For testing models - the dismal spreadsheet
- The Psychological Soar Tutorial (PST)
- Electronic Warfare Task

cont:



University Based -2

□ Work:

- Initial modeling of experimental category data based on SCA
- Models that learn through interaction:
 - Able III,
 - Diagrammatic reasoning,
 - ATC,
 - models of eye and hand.
- The Soar FAQ and Soar mirror site

cont:



University Based -3

□ Development environment :

- MacPowerBook, Soar-7.0.5
- Sun, Unix, Soar-7.0.4
- SGI, Unix, Soar-7.0.4

□ Web Page:

[http://www.psychology.nottingham.ac.uk/staff/
Frank.Ritter/credit-projects.html](http://www.psychology.nottingham.ac.uk/staff/Frank.Ritter/credit-projects.html)



University Based -4

□ Location:

University of Hertfordshire: Richard Young

□ Work:

Web-Based Data Chunking Tutorial

- About 1/3 complete, but usable.
- Covers the basic approach to recognition-based learning, and shows how multi-pass, pre-event learning emerges from a rational organization of the problem solving without any special 'learning' or 'data chunking' operators or code having to be written.

cont:



University Based -5

□ Work:

- Later additions will cover post-event varieties of learning
 - 'reflective' learning,
 - learning from knowledge of results,
- and the topic of generators.



Non-University Based -1

□ Location:

DERA - Portsmouth West (Naval).

□ Work:

- Intelligent Decision Support System
- Modeling of Anti-Aircraft Warfare Officer for STOW-97

□ Development environment :

- SGI Indigo2, Irix, Soar-7.0.4
- Desktop PC, Linux 2.0.0, Soar-7.0.4,
- Notebook PC, Linux 2.0.0, Soar-7.0.4,
Win95, Soar-7.1

cont:



Non-University Based -2

□ Future Work:

- Stow Legacy:
 - Incorporate Debrief into AAWO model.
 - Prediction of other (enemy) agents' intentions
- Operations Room (CIC) populated by Soar agents (Using STEAM).
- Incorporation of 'emotional' component, e.g. fatigue.



Non-University Based -3

□ Location:

DERA - Bedford (Air)

□ Work:

○ Using the US TacAir system for STOW-97

□ (Possible) Future Work:

○ Intelligent Wingman

○ Intelligent co/autopilot for damage control

cont:



Non-University Based -4

□(Possible) Future Work:

- Use of an expert Soar Pilot of known quality for assessment of human pilots
- Training a 'creature' to become a pilot.