

REBOL OPEN CHALLENGE '2005

Organized by
Laboratoire Développement et Complexité
Development and Complexity Laboratory
Ecole Pratique des Hautes Etudes
F-41 rue Gay-Lussac 75005 Paris

Public : This challenge is opened to all the programmers, on a purely individual basis, with an aim of promoting qualities of Rebol programming language for professional distributed applications. Are excluded from the contest the organizers of the challenge

Objectifs : To promote the specific advantages of Rebol language messenger for the programming of distributed systems.

Sujet : Programming in Rebol a distributed and interactive application for the analysis and/or for the diagnosis from a distibuted system involving different multimodal information. *With an altruistic spirit and free from any concept of profit the challenge consists on developing an original application making it possible to carry out a complex task from information resulting from various multimedia sources. It will also be a question of meerging this information for the decision-making process. This decision (distributed) will be able to correspond to :*

- a tool of diagnosis and prevention of sensory disorders like the early disorders of the vision or hearing ;
- a network data-processing tool of assistance to the diagnosis and the cognitive rehabilitation of brain-injured patients ;
- a tool involving the monitoring for the follow-up and the maintenance in residence of patients, infants, children or aging people;
- a tool of follow-up and analysis of the movements for helping the use of computer for sensory or motor impaired people;
- a tool of follow-up and analysis of motion of sportsmen or technical professionals

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- movements;
- applications for robotics.

This list is not restrictive and can be freely interpreted by all.

Langage de programmation : The applications will have to function under Linux or Windows. The implementation code will be necessarily written in Rebol. In addition, the code of the application will have to be diffused open source license (GNU LPG, CeCILL...). In order to illustrate the Rebol usefulness and to show its power for the programming of application distributed, the produced code will have to be able to interface with open software source, which was developed for the multimode interactions. Nevertheless, the Rebol code provided would be able to also propose an implementation 100% Rebol of the functionalities offered by the software "open-source". The software, which was retained for Rebol Open Challenge, is as follows:

- The library "Open Source Computer Vision (OpenCV)" is a collection of C functions and C++ classes, including the source code, which implement the majority of the algorithms known in the field of the image processing, the vision by computer and the recognition of the movement. OpenCV is distributed in Open Source on <http://sourceforge.net/projects/opencvlibrary/>.
- FreeTTS is a system of voice synthesis written in Java. FreeTTS is distributed in stable version on <http://sourceforge.net/projects/freetts/>.
- Sphinx-4 is a system of voice recognition. One can find Sphinx-4 on the site sourceforge.net/projects/sphinx4/.
- Dasher (<http://www.inference.phy.cam.ac.uk/dasher/Download.html>) allows to build interfaces which do not require the use of a keyboard.

Each application will have to be accompanied with a technical note detailing with precision the functionalities offered by the application and the procedure of installation. In a preoccupation with an equal opportunity of all, blind examination of the programs will be performed by independent experts chosen by the organizers of the challenge.

Rewards: The winner of Rebol Open Challenge will receive a reward of 1000 € (euros) offered by the LDC/EPHE. The number and the amount of the rewards are likely to vary if other sponsors join the ROC. The reward will be given to the winner at the time of RebolDay3 '2005 to be held in France.

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Special Reward « La Galantine ». Famous french restaurant La Galantine offers a special reward Convivialité (a meal for two people) for the application presenting the most convivial interface.

Committee :

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- Olivier Auverlot, Rebol France, rebolfrance@numericable.fr

Planning :

- October 2004 : Opening of the Open Rebol Challenge;
- June 2005 : Reception of the programs proposed to the challenge;
- October 2005 : The winner of Rebol Open Challenge will receive the reward.

Partners :



La Galantine

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