

CCC 2008 @ ECCBR 2008

1st Computer Cooking Contest, September 1

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Who says that only human beings are able to cook delicious meals? We aim to teach our computers the haute cuisine and therefore we need your creativity and ideas! Come to the European Conference on Case-Based Reasoning (ECCBR'08) in Trier and participate in the Computer Cooking Contest (CCC)! Write your own software application for the live competition. Show that your program is more creative than the average kitchen user. Let your computer's recipe creations be evaluated by a professional cook and an international jury of scientists!

Rationales

Once upon a time in the past, when we still were students, we wondered whether there could be a software which would relieve us from the task of matching the content of our fridge to a dish. Given a restricted set of ingredients, the task is to cook something, where something does taste good. Ideally, something moreish.

Once upon a time in the present, when we were not students anymore, we wondered whether there could be a software which would relieve us from the task of explaining what we are doing, e.g. case-based reasoning, to a broader audience. Given the technological state of the art, the task is to demonstrate something, where something solves a problem. Ideally, something moreish.

Glue the two together and you get it: The Computer Cooking Contest!

Moreish means: it tastes like more. This is the rationale behind the contest, too. It will attract new people, e.g. students, to deal with AI technologies such as case-based reasoning, semantic technologies, search and information extraction. Also cooking is fun, in particular when using a computer for the design of the menu. Furthermore, the contest will attract the public. Since everybody knows something about cooking, people will be curious what a computer might do about it. Furthermore, we all have noticed the increasing interest of the public audience in cooking, stipulated by the growing insight that good food is mandatory for health. Hence,

the Computer Cooking Contest offers the opportunity to explain the benefits of our technologies intelligible to all.

Competition

The Computer Cooking Contest is an open competition. Any individual, student, research group and professional is invited to submit software that creates a recipe for a single dish or even a three course menu. The input will be a database of basic recipes from which appropriate recipes must be selected, modified, or even combined. The queries to the system consist of a number of wanted ingredients and other requirements for the dish or menu.

The overall competition is structured into a main compulsory task and two additional challenge tasks.

The **Compulsory Task** involves answering queries that require the selection and modification of recipe for a single dish.

The **Negation Challenge** is to answer queries that involve avoiding certain ingredients, which you don't like or which are not available. This can be done, for example, by selecting an appropriate recipe or by replacing or removing some ingredients from a recipe.

The **Menu Challenge** requires the composition of a three-course menu based on the available recipes. Please note that for most of the queries there is not a single correct or best answer. Usually many different solutions are possible, depending on your creativity or the creativity of your software. We also do not imply any restriction on the technology to be used. The only restriction we impose is that the given database of recipes must be used as a starting point. We will not provide a formal query language. Queries will be described in free text but the software to be developed can use any kind of user interaction (structural/formula-based, conversation, text-based).

Evaluation Criteria

All systems will be evaluated with respect to **scientific/technical quality** (technical originality of the approach,

usability of the software, maintainability, and scalability) and with respect to the **culinary quality** of the created recipes (appropriate to the query, tasty, cookable, creative). The evaluation will involve a peer-review of the papers describing the system and an assessment by an international jury of experts including a professional cook. We also intend to give the ECCBR attendees an additional vote.

Procedure and Timeline

September 1, 2007 Publication of Contest Conditions and Material

June 2, 2008 Qualifying Examination
To this deadline, the contest participants must submit:

- an up-to 10 page technical description of the system,
- the URL of the running system (web interface) or the executable software (must run on Windows)
- the system results for the first set of queries.

In a peer review process, the submitted papers and the systems will be evaluated and the best contestants are selected for participation in the final. The finalists may – of course – continue to improve their systems for the final.

August 1, 2008 Publication of the Contest Recipes

An extended database including additional recipes will be published four weeks prior to the contest. The extended database must be used for all queries in the competitions' final. The contest participants must update their system to include the new recipes.

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The finalist systems are demonstrated at the Computer Cooking Contest at ECCBR. At least one person per finalist must register for ECCBR and demonstrate the system. The systems are evaluated according to the initial set of queries and a confidential set of new queries.

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