

Press release Athens, November 2014

BioASQ challenge gaining momentum

BioASQ is a series of challenges aiming to bring us closer to the vision of machines that can answer questions of biomedical professionals and researchers. The second BioASQ challenge started in February 2013. It comprised two different tasks: Large-scale biomedical semantic indexing (Task 2a), and biomedical semantic question answering (Task 2b).

In total **216 users and 142 systems** registered to the automated evaluation system of BioASQ in order to participate in the challenge; **28 teams (with 95 systems)** finally submitted their suggested solutions and answers. The final results were presented at the BioASQ workshop in the Cross Language Evaluation Forum (CLEF), which took place between September 15 and 18, 2014, in Sheffield, U.K.

The Awards Went to the Following Teams

- Task 2a (Large-scale biomedical semantic indexing):
 - Fudan University (China)
 - NCBI (USA)
 - Aristotle University of Thessaloniki (Greece) and atypon.com (USA)

- Task 2b (Biomedical semantic question answering):
 - Fudan University (China)
 - NCBI (USA)
 - University of Alberta (Canada)
 - Seoul National University (South Korea)
 - Toyota Technological Institute (Japan)
 - Aristotle University of Thessaloniki (Greece) and atypon.com (USA)
- Best Overall Contribution:
 - NCBI (USA)

The second BioASQ challenge continued the impressive achievements of the first one, pushing the research frontiers in biomedical indexing and question answering. The systems that participated in both tasks of the challenge achieved a notable increase in accuracy over the first year. Among the highlights is the fact that the best systems in task 2a outperformed again the very strong baseline MTI system provided by NLM. This is despite the fact that the MTI system itself has been improved by incorporating ideas proposed by last year's winning systems. The end of the second challenge marks also the end of the financial support for BioASQ, by the European Commission. We would like to take this opportunity to thank the EC for supporting our vision. The main project results (incl. frameworks, datasets and publications) can be found at the project showcase page at http:/bioasq.org/project/showcase. Nevertheless, the BioASQ challenge will continue with its third round BioASQ3, which will start in February 2015. Stay tuned!

About BioASQ

The BioASQ team combines researchers with complementary expertise from 6 organisations in 3 countries: the Greek National Center for Scientific Research "Demokritos" (coordinator), participating with its Institutes of 'Informatics & Telecommunications' and 'Biosciences & Applications', the German IT company Transinsight GmbH, the French University Joseph Fourier, the German research Group for Agile Knowledge Engineering and Semantic Web at the University of Leipzig, the French University Pierre et Marie Curie-Paris 6 and the Department of Informatics of the Athens

University of Economics and Business in Greece (visit the BioASQ project partners page: <u>http://bioasq.org/project/partners</u>). Moreover, biomedical experts from several countries assist in the creation of the evaluation data and a number of key players in the industry and academia from around the world participate in the advisory board of the project.

BioASQ started in October 2012 and was funded for two years by the European Commission as a support action (FP7/2007-2013: Intelligent Information Management, Targeted Competition Framework; grant agreement n° 318652). More information can be found at: <u>http://www.bioasq.org</u>.

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