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Workshop 2

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Executive Summary

The second BioASQ workshop took place within the Question Answering Track at CLEF 2014 on September 15th, 2014 at the University of Sheffield.¹ The workshop was designed to allow space for presentations by participants in the challenge as well as papers related to the area of bio-medical semantic indexing and question answering. Between 35 and 40 persons attended the 11 talks and the panel of the workshop. The proceedings were published within the CLEF 2014 proceedings (Kanoulas et al., 2014; Cappellato et al., 2014). This report gives a brief overview of the organization and execution of the workshop.

¹<http://www.bioasq.org/workshop/programme>

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Introduction

The goal of the second BioASQ workshop was to (1) further the interaction across the community all around the project and (2) measure the advancements over the first version of the workshop, which was carried out in 2013. Given that the main aims of the project is to create a challenge for bio-medical semantic indexing and question answering, the main goal of the workshop was accordingly to (1) allow for challenge participants to present their systems, (2) present the challenge baselines and the technologies around it, (3) present the state of the art in the industrial uptake of bio-medical question answering and (4) compare this year's results with the results of last year. In the following, we give a brief overview of the workshop organization, the corresponding schedule and an overview of the results of the workshop evaluation by the participants.

Organization

We designed the workshop to be a venue where experts on semantic indexing and question answering could come together to present their work on the BioASQ data or related data. We thus sent open call for papers through CLEF 2014 as well as to the following mailing lists:

- eetn@iit.demokritos.gr
- list-mm@iti.gr
- list-multi-mine@iti.gr
- kdnet-members@iais.fraunhofer.de
- dbhellas@hdms.gr
- DDLbeta@googlegroups.com
- editor1@kdnuggets.com
- uai@ENGR.ORST.EDU
- ml@isle.org
- ML-news@googlegroups.com
- researchers@pascal-network.org
- IRList@lists.shef.ac.uk
- majordomo@cs.wisc.edu
- uai@engr.orst.edu
- kdubiq_members@iais.fraunhofer.de
- kdnet-members@iais.fraunhofer.de

- IRList@lists.shef.ac.uk
- researchers@pascal-network.org
- dbitaly@list.dia.uniroma3.it
- eetn@iit.demokritos.gr
- all@liaad.up.pt
- redes@appia.pt
- cladlead@fpce.ul.pt
- sbc-1@sbc.org.br
- event@in.tu-clausthal.de
- corpora@uib.no
- bionlp@lists.ccs.neu.edu
- connectionists@csd.cmh.edu
- ml@isle.org

Moreover, a link to the call for papers was sent to LinkedIn groups (DM, NLP People, NLP Forum, ML, SW Analytics, Text Analytics and SYNC3) as well as tweeted.¹ We received 10 submissions, which were reviewed by experts. Given the CLEF policy, the review process was less strict than last year. Still, for each submission, we ensured that we had at least two reviews. Only 1 paper was rejected. The resulting schedule is shown in Figure 2.1 and consisted of 8 oral paper presentations, 1 invited talk (by Patrick Ruch) as well as a BioASQ overview and award ceremony.

¹ The text of the call for papers can be found at <http://bioasq.org/news/call-participation-second-bioasq-challenge-large-scale-biomedical-semantic-indexing-and>.

Tuesday 16th Sept.

Room HT2: High Tor 2

10:30 - 10:40	Welcome
10:40 - 11:00	QALD Overview. C. Unger
11:00 - 11:25	Entrance Exams Overview. Anselmo Peñas
11:30 - 12:30	Invited talk: P. Ruch "An Inquiry into Question-Answering and Deep QA" [presentation]
12:30 - 13:30	Lunch
13:30 - 13:50	BioASQ Overview: A. Krithara and G. Paliouras [presentation]
13:50 - 14:15	BioASQ paper: J. Lingeman and L. Dietz "UMass at BioASQ 2014: Figure-Inspired Text Retrieval" [presentation]
14:15 - 14:40	BioASQ paper: M. L. Neves "HPI in-memory-based database system in Task 2b of BioASQ" [presentation]
14:40 - 15:05	BioASQ paper: J. G. Mork, D. Demner-Fushman, S. C. Schmidt, A. R. Aronson "Recent Enhancements to the NLM Medical Text Indexer" [presentation]
15:05 - 15:30	BioASQ paper: J. R. Adams and S. Bedrick "Automatic Classification of PubMed Abstracts with Latent Semantic Indexing" [presentation]
15:30 - 16:00	Break
16:00 - 16:25	BioASQ paper: F. J. Ribadas, L. M. de Campos, V. M. Darriba, A. E. Romero "CoLe and UTAI participation at the 2014 BioASQ semantic indexing challenge" [presentation]
16:25 - 16:50	BioASQ paper: Y. Papanikolaou, D. Dimitriadis, G. Tsoumakas, M. Laliotis, N. Markantonatos, I. Vlahavas "Ensemble Approaches for Large-Scale Multi-Label Classification and Question Answering in Biomedicine" [presentation]
16:50 - 17:15	BioASQ paper: Y. Mao, C.-H. Wei, Z. Lu "NCBI at the 2014 BioASQ challenge task: large-scale biomedical semantic indexing and question answering" [presentation]
17:15 - 17:40	BioASQ paper: K. Liu, J. Wu, S. Peng, C. Zhai, S. Zhu "The Fudan-UIUC participation in the BioASQ Challenge Task 2a: The Antinomyra system" [presentation]
17:40 - 18:00	BioASQ announcement of winners and awards [presentation]

Figure 2.1: Schedule of the first BioASQ workshop

Evaluation

We measured the impact of the workshop on our main social media channel, i.e., Twitter. The results were very satisfactory, as the tweets pertaining to the project and its results reached a peak of 9520 persons/week on the week of Sept. 15th (i.e., the week of the workshop) and 13,165 persons in the month of September alone. An overview of the reach of BioASQ message over the month of September is given in Table 3.1. The positive dissemination results were further supported by the wide attendance to the workshop, with more than 35 participants (158 participants registered for the overall 8 labs at CLEF 2014).

We conducted an online evaluation of the workshop (figures 3.1, 3.2 and 3.3). All members of the BioASQ team were excluded from the evaluation as they would have biased the result. Overall, 9 participants filled out the survey form. The results of the survey are as follows:

1. 22% of the participants were first reached via mail resp. personal contact.
2. Most of the people who did not participate to the challenge did not do so because of time restrictions or lack of willingness.
3. Only 1 participant did not participate because he did not know the project.
4. Most participants were satisfied with the dissemination efforts of the project (e.g., one participant stated “I think you are doing really great with promotion.”). One suggested “Emphasize the broad

Week	Reach for @BioASQ
Sep 29, 2014	1482
Sep 22, 2014	1522
Sep 15, 2014	9520
Sep 08, 2014	747
Sep 01, 2014	344

Table 3.1: Number of persons reached by BioASQ’s tweets.

Question	Very bad	Bad	OK	Good	Very good
Quality of the scientific presentations	11%		44%	22%	22%
Quality of the keynotes	11%		22%	44%	22%
Quality of the BioASQ presentation	11%		22%	33%	33%

Table 3.2: Summary of the results of the workshop assessment

impact to the biomedical research community.”, which will be taken into account for the next workshop.

The workshop itself was evaluated with a 5-point scale (Very bad, Bad, OK, Good, Very Good) given three key aspects of the workshop, as summarized in Table 3.2. Based on these results, we conclude that the workshop was perceived as good. Suggestions with respect to improving the workshop included putting more emphasis on the breadth of the workshop and its importance for the bio-medical community around the world.

Workshop Assessment Survey BioASQ

Short survey to assess the BioASQ workshop. More information on the project can be found at <http://bioasq.org/>.

* Required

General Information

Please provide us with information about your participation to the workshop

*Where did you hear about BioASQ? **

- Mailing List
- Personal Contact
- LinkedIn
- Twitter
- Other:

*Did you participate in the challenge? **

- No
- Yes, in Task 2a only
- Yes, in Task 2b only
- Yes, in Task 2a and Task 2b

If not, why are you not participating?

- Time restrictions
- Not my area of research
- BioASQ unknown so far
- Other:

*Are you planning to participate in the BioASQ3? **

- No
- Yes, in Task 3a

Figure 3.1: First part of the BioASQ workshop assessment survey

- Yes, in Task 3b
 Yes, in both tasks
 Other:

Workshop Organization

*Please evaluate the following parts of the workshop. **

	Very bad	Bad	OK	Good	Very good
Scientific presentations	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Keynotes	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
BioASQ presentation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Do you have any other suggestions to help us improve the organization of the workshop?

How could the promotion of the workshop be improved?

Personal Details

Name

Figure 3.2: Second part of the BioASQ workshop assessment survey


Email Address

May we follow up with you if required?

Yes

No

Never submit passwords through Google Forms. 100%: You made it.

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Figure 3.3: Second part of the BioASQ workshop assessment survey

Organization of BioASQ 2015

We are currently beginning to organize the third BioASQ workshop. After the successful collaboration with CLEF, we plan to continue our collaboration in 2015. We aim to publish extended versions of the papers describing the systems which participated into BioASQ in the Journal of Bio-medical Semantics supplement dubbed “Supplement on Semantics-Enabled Biomedical Information Retrieval”.

A

Call for Papers

BioASQ challenge on large-scale biomedical semantic indexing and question answering (part of the CLEF 2014 QA track to take place in Sheffield, UK, 15-18 September, 2014)

- **Web site:** <http://bioasq.org/>
- **twitter:** <https://twitter.com/bioasq>
- **CLEF-QA site:** <http://nlp.uned.es/clef-qa/>

The BioASQ challenge consists of two different tasks (Task 2a and Task 2b). If you are interested in any of the following areas:

- Large-scale and hierarchical classification
- Machine learning
- Semantic Indexing, semantic similarity

then you may want to participate in BioASQ Task 2a (large-scale biomedical semantic indexing). More information at <http://bioasq.org>.

If you are interested in any of the following areas:

- Question answering from unstructured and structured data
- Single and multi-document summarization
- Information retrieval and passage retrieval
- Semantic indexing, semantic similarity and reasoning
- Machine learning, classification, learning to rank
- Named-entity recognition and disambiguation

- Information extraction, fact checking, relation extraction
- Textual entailment
- Natural-language generation

then you may want to participate in BioASQ Task 2b (biomedical semantic QA). More information at <http://bioasq.org/workshop>.

Task descriptions: <http://bioasq.org>

Important dates:

- Task 2a: You can join anytime from February 03, 2014 onwards. New data sets will be released weekly.
- Task 2b: You can join on ANY of the following dates:
 - March 05, 2014
 - March 19, 2014
 - April 02, 2014
 - April 16, 2014
 - April 30, 2014.

Detailed schedule at <http://bioasq.org/participate/schedule>.

Training data for both tasks available at <http://bioasq.lip6.fr/>.

Prizes: <http://bioasq.org/participate/prizes>

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Bibliography

- L. Cappellato, N. Ferro, M. Halvey, and W. Kraaij, editors. *Working Notes for CLEF 2014 Conference, Sheffield, UK, September 15-18, 2014*, volume 1180 of *CEUR Workshop Proceedings*, 2014. CEUR-WS.org. URL <http://ceur-ws.org/Vol-1180>.
- E. Kanoulas, M. Lupu, P. D. Clough, M. Sanderson, M. M. Hall, A. Hanbury, and E. G. Toms, editors. *Information Access Evaluation. Multilinguality, Multimodality, and Interaction - 5th International Conference of the CLEF Initiative, CLEF 2014, Sheffield, UK, September 15-18, 2014. Proceedings*, volume 8685 of *Lecture Notes in Computer Science*, 2014. Springer. ISBN 978-3-319-11381-4. doi: 10.1007/978-3-319-11382-1. URL <http://dx.doi.org/10.1007/978-3-319-11382-1>.