



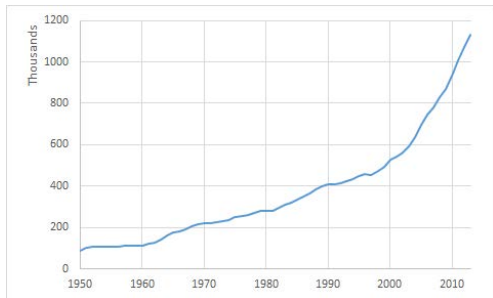
BioASQ

Project Vision and Overall approach

George Paliouras and Anastasia Krithara

paliourg@iit.demokritos.gr, akrithara@iit.demokritos.gr

Vision



- ▶ 2 articles published in biomedical journals **every minute!**
- ▶ Make sure this knowledge is used to the benefit of patients
- ▶ Need to make it accessible to biomedical experts
- ▶ Search is not effective enough
- ▶ Push research in automated answering of questions
- ▶ A challenge for such systems can achieve a multiplying effect

What is BioASQ

- ▶ BioASQ initiated a series of **challenges** on **biomedical semantic indexing** and **question answering (QA)**.
- ▶ Participants are required to index semantically content from **large-scale** biomedical resources (e.g. MEDLINE) and/or
- ▶ to assemble data from **multiple heterogeneous sources** (e.g. scientific articles, knowledge bases, databases)
- ▶ to compose **informative answers** to biomedical natural language questions.

BioASQ Tasks

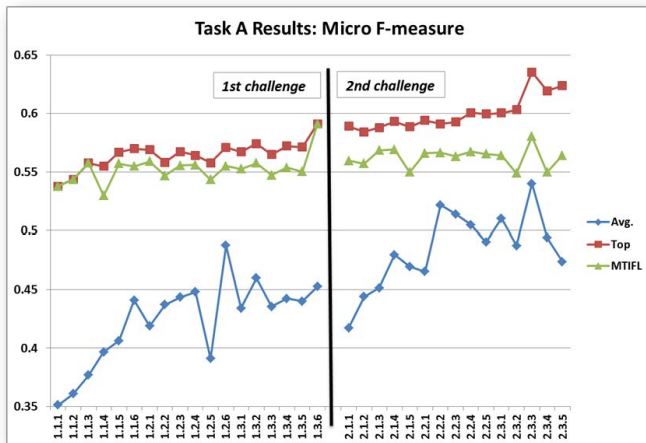
Task A: Hierarchical text classification

- ▶ Organizers distribute **new unclassified MEDLINE articles**.
- ▶ Participants assign **MeSH terms** to the articles.
- ▶ **Evaluation** based on annotations of **MEDLINE curators**.

Task B: IR, QA, summarization

- ▶ Organizers distribute **English biomedical questions**.
- ▶ Participants provide: relevant **articles, snippets, concepts, triples** (phase A) and **'exact' answers, 'ideal' answers** (phase B).
- ▶ **Evaluation:** both **automated** and **manual**.

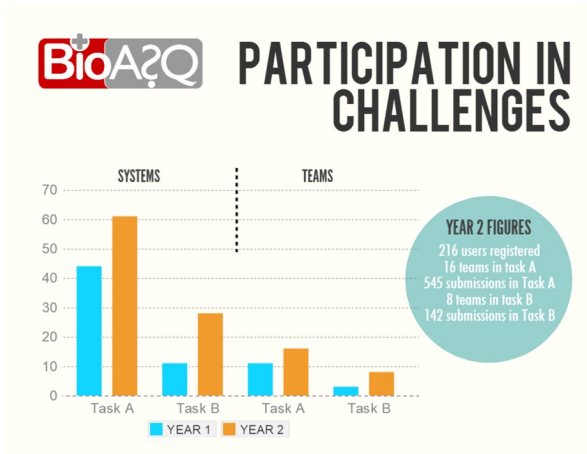
Advancing the SoA in large-scale semantic indexing and QA.



of all participating systems. **Top:** Best system. **MTIFL:** baseline

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Organisation of the challenge

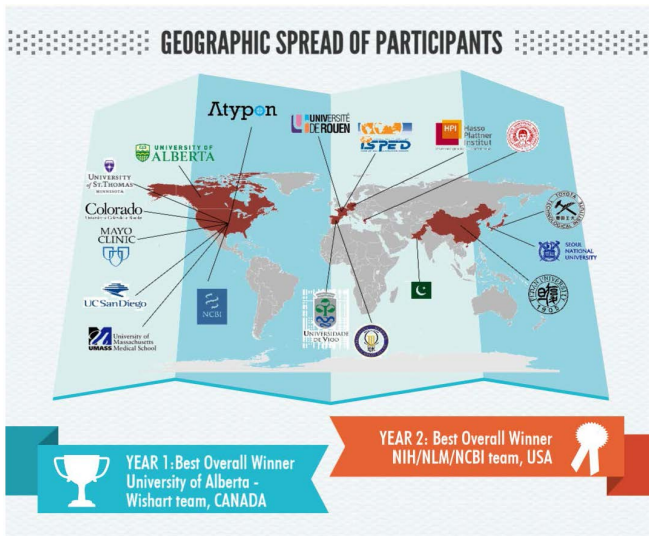


Organisation of the challenge

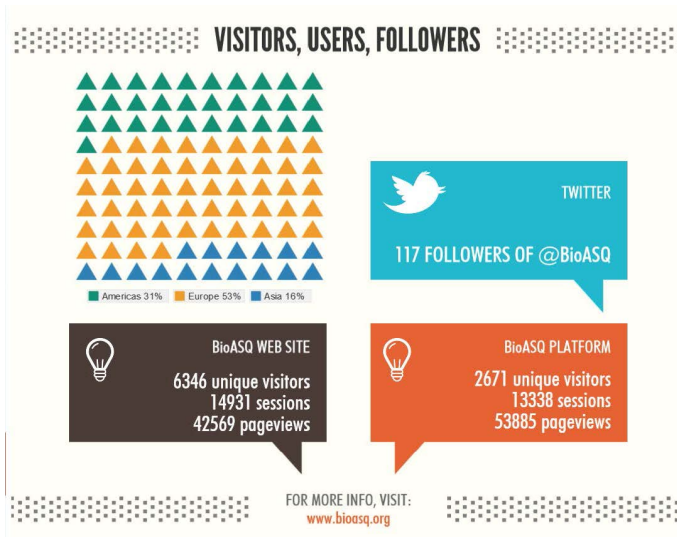
YEAR 2: PARTICIPATION PER TASK



Organisation of the challenge

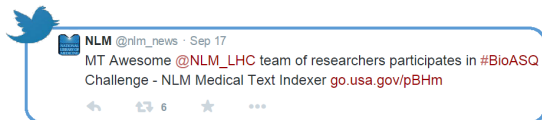


Organisation of the challenge

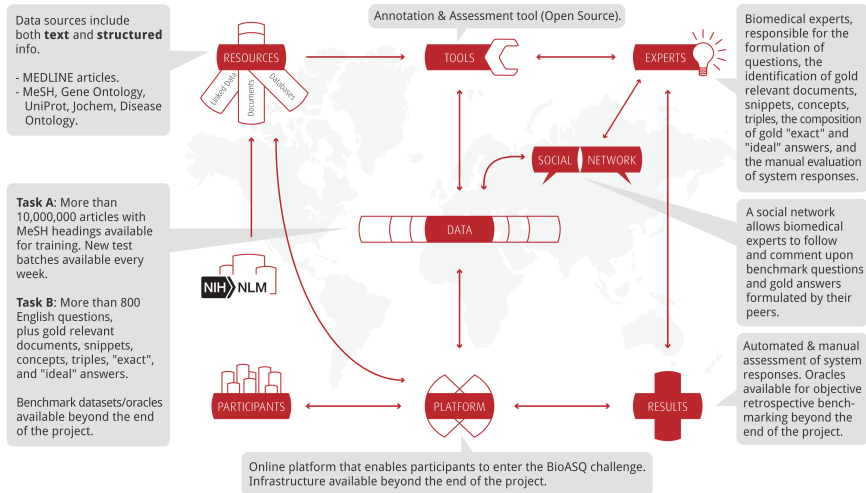


BioASQ as a reference point in biomedical QA

- ▶ Attraction of key players in the field
 - ▶ Challenge Participants
 - ▶ Advisory board members
- ▶ BioASQ Social network
- ▶ Benchmark sets available
- ▶ NLM Statement



BioASQ Infrastructure



Future steps

- ▶ BioASQ in 2015
 - ▶ Third challenge is already running
 - ▶ Part of CLEF 2015



Visit www.bioasq.org
 Platform participants-area.bioasq.org
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