

QIBA Volumetric CT Group 3A Update

Thursday, October 6, 2011; 11 AM CDT

Draft Call Summary

In attendance

Maria Athelougou, PhD (Chair) Dirk Colditz, PhD Grace Kim, PhD
Hubert Beaumont, PhD Alden Dima, MS Nicholas Petrick, PhD
Andrew Buckler, MS Dave Gustafson, PhD Ying Tang, PhD

RSNA

Julie Lisiecki

I. Update on study design documents (NIST)

- Due to issues with the "Freedom of Information Act," RSNA will serve as the "Registrar" or point of contact.
- A code will be assigned to each participant who will be responsible for using the code to submit data, taking care not to use any identifiers
- RSNA staff will remove any tags or identifiers from the email thread and will send the anonymized data back to NIST
- There is some concern with NIST's legal department regarding the use of the logo
 - Mr. Dima will follow up with the NIST legal team to file the appropriate "memorandum of understanding"
 - He anticipates securing the use of the logo on the challenge invitation will not delay the project.

II. Challenge Project

- Mr. Dima and Dr. Saiprasad are working on issues with 1A data, seed points, and bounty boxes offline
 - They will consult with Dr. Gavrielides at the FDA regarding true anthropomorphic features
- RSNA has established a specific email for the challenge. It is: QIBACHallenge@rsna.org.
- Dr. Kim will provide statistical analysis for the project, which is funded via her subaward from the NIBIB contract.

Checklist for items to request from participants in the Challenge provided by Dr. Athelougou:

Each submission must have an algorithm description: Abstract minimum of 5 sentences; maximum of 10 sentences.

1. Is the algorithm automatic or Semi-automatic? If user editing is needed, how much is needed and in what way?
 - This has to include workflow and interaction with the user.
2. Limitations of the algorithm (*optional*), e.g.:
 - Is the algorithm specifically designed to segment only certain types of scans?
 - Is the algorithm specifically designed to segment only certain types of lung nodules?
 - Is the algorithm optimized to work for scans with thick or thin slices?
 - Are other technical scan parameters expected to influence segmentation performance?
 - Was the algorithm trained with example data from other data sources? If so, what kind of training data?
 - What is the average runtime of your algorithm, and on which system is this runtime achieved?
3. This checklist would be useful to incorporate into a report/ spreadsheet/ dataset. Can use the numbers to stratify.

III. Challenge Project Team Registration (to be submitted to RSNA):

- Team Name and URL
- Email Address
- Version number and identification of the algorithm (not public information)
- Contact Person(s)
- Affiliation and URL
- Country
- - "I agree with the rules stated from NIST and QIBA for participation in this challenge."

Next steps:

- Mr. Dima to follow up with the NIST legal department regarding logo use for the Challenge invitation
- Mr. Dima and Dr. Saiprasad to clarify and finalize the data questions with Dr. Gavrielides prior to the next call.
- Dr. Athelougou to send a sample checklist or methods and results form for consideration for participant consistency

Next regularly scheduled call: **Thursday, October 20, 2011 at 11 am CDT.**