IEEE LTSC Monthly Meeting
Tuesday, 10 September 2019, 9:00 am Eastern Time

Administrative Issues and New Business

1. Roll call, establish quorum
   a. Please sign in on the IEEE LTSC Roster here: https://goo.gl/b7zQVL
   b. Please update your affiliation information there, if it has changed.
   c. If you can’t get to that file, just let us know you’re here.
   d. Regular attendance is required to be a voting member and to be counted towards quorum. Let us know if we’ve made an eligibility error.
   e. Today: 20 voting members out of 25. Quorum achieved!

2. Review and approval of today’s agenda. Please feel free to add to the notes during the meeting.

3. Review and approval of our last meeting’s minutes. The notes from the recent meeting are posted on the LTSC website on the Meetings & Agenda tab, here.

4. Antitrust and IP awareness
   a. This is a TECHNICAL committee. Please familiarize yourself with these antitrust and IP guidelines for IEEE meetings.
   b. In order to prevent the situation where implementing a future standard requires an unreasonable or unfair charge by a patent holder, YOU are asked to report the existence of any patent claims (held by you or by anyone else) that might be essential to implementers of any proposed standards (Potentially Essential Patents):
      i. Speak up now, or
      ii. Report any essential patents of which you are personally aware to the Chair, or
      iii. Cause a Letter of Assurance to be submitted to the IEEE-SA, which will assure that either the patent won’t be enforced or that it will be licensed on a reasonable and non-discriminatory basis.
   c. Don’t discuss
      i. the interpretation, validity, or essentiality of patents/patent claims.
      ii. specific license rates, terms, or conditions.
      iii. the fixing of product prices, allocation of customers, or division of sales markets.
      iv. the status or substance of ongoing or threatened litigation.
   d. Don’t be silent if inappropriate topics are discussed … do formally object.
5. LTSC Officer Elections
   b. Brief comments from the candidates.
   c. Nomination close after this meeting.
   d. A ballot will be posted online.
   e. Elections open until October 7th.
   f. New officers announced at our monthly meeting on 8 October
   g. New officers take over after the December monthly meeting.

6. Vanessa Lalitte, our new IEEE Liaison Officer, would like to speak with all of the Working Group chairs individually, at your convenience. Please contact Vanessa at v.lalitte@ieee.org.

7. News and New Projects
   a. Reflections on our face-to-face meetings in Alexandria last month.
   b. Nescom approved Hamadou Saliah-Hassane’s joint standards project between the LTSC (IEEE Computer Society), the Education Society, and the Industrial Electronics Society focused on security called “Secured and Trusted Learning Systems.”
      i. IEEE-SA (through the TAB Committee on Standards) grant approved - $10K mainly for meetings later this year.
      ii. Contact Hamadou Saliah-Hassane hsaliah@ieee.org.
   c. NesCom approved Andy Johnson’s PARs for revision projects for two more expiring SCORM standards:
      i. P1484.11.2, ECMAScript Application Programming Interface for Content to Runtime Services Communication
      ii. P1484.12.1, Standard for Learning Object Metadata (LOM)
      i. **Goal:** Update the IEEE’s 2003 Learning Technology Systems Architecture standard 1484.1 and publish a crowd-maintained, updated, conceptual/logical meta model with linked alignments to relevant data, technical, policy, and achievement standards
      ii. If you are interested in helping to launch the group, send an email to gregnadeau7@gmail.com
   e. Spoken Language Interest Group (SLIG) news: Please see https://phabricator.wikimedia.org/T166929#5473028 for an effort to support unconstrained keyword spotting interactions with 0.6 GB of data, including schema updates. Want to help? http://bit.ly/slig and/or https://donate.speakclearly.info.
   f. The deadline for the November NesCom meeting is September 17.

8. The LTSC websites has moved. Change your bookmarks: https://sagroups.ieee.org/ltsc/.
a. Pankaj Agrawal has volunteered to fix problems with the LTSC website. Please let us know if you see anything problematic.
b. Working Group chairs (and others) are encouraged to submit updates the content on the website. Some of it is quite out of date.

9. Upcoming meetings
   a. Competency standards P1484.20.1. Second Monday 11am Eastern 
   b. xAPI standard WG. Second Tuesday, 2:30 PM Eastern
   c. xAPI standard editing sub-group. Third and Fourth Tuesday, 2:30 PM Eastern
   d. AIS WG meets monthly: Second Thursday, 10:00am Eastern. AIS Workshops at I/ITSEC (see below)
   e. eBooks for Learning (7919.1), Wednesdays @ 9:00 AM Eastern ??
   f. The guest speakers at this month’s TLA Working Group meeting will focus on xAPI. Contact avron@aldo.com to get on the invite list.
   g. ICICLE SIG meetings continue (check site https://ieeeicicle.org/sigs )
   h. ICICLE community meeting on 19 September, 11:00am Eastern. join.me/IEEE-ICICLE

Working Group Reports

10. Standards for Mobile Learning Technology WG - Elliot Robson
    a. (http://sites.ieee.org/sagroups-7919-1/)
       a. P7919.1 -- defining levels of functionality of mobile eReaders.
       b. Member Sign Up: http://sites.ieee.org/sagroups-7919-1/members/
       c. Next meeting: ?
       d. Elliot Robson, Chair; Andy Johnson, Secretary.

11. xAPI WG (9274). Jono Poltrack.
    a. 9274.1.1 xAPI Base Standard
       i. Website: http://sites.ieee.org/sagroups-9274-1-1/
       ii. If you are interested in participating in xAPI base spec standardization, sign up at http://sites.ieee.org/sagroups-9274-1-1/members/
       iii. Face to face meeting recap
       iv. Meetings
           1. Working Group meeting Sept 10th (today) at 2:30 ET (and 2nd Tuesday every month)
           2. Editing Sub-Group meeting 3rd and 4th Tuesday of each month at 2:30 eastern
       v. Contact Jono Poltrack. jono@veracity.it
    b. Several other standards projects are being planned:
1. Upcoming New PAR Draft - p9274.4.2 -- Recommended practice for xAPI Security
2. P9274.4.1 -- Recommended practice for xAPI implementation
3. P9274.2.1 (Profile Spec)
4. P9274.3.n (Individual Profiles)

12. Competencies, Jim Goodell.
a. 1484.20.1 (revision) - Competency Data Standards
b. The revision of the old Reusable Competency Definitions standards will refer to the common elements identified by the Credential Ecosystem Mapping Project.
c. Meets on 2nd Monday of the month at 11am EDT. [www.join.me/IEEE-LTSC](http://www.join.me/IEEE-LTSC)
d. **Please join us!** If you plan to participate in the workgroup, please register to be on the mailing list for meeting notices here: [http://sites.ieee.org/sagroups-1484-20-1/members/](http://sites.ieee.org/sagroups-1484-20-1/members/
)
e. **Next Meeting:** Monday, October 14, 2019 - 11:00 am EDT (15:00 UTC) [www.join.me/IEEE-LTSC](http://www.join.me/IEEE-LTSC)
f. Contact: Jim Goodell, jimgoodell@qi-partners.com

13. Child and Student Data Governance (CSDG WG), P7004. Marsali Hancock.
a. Working on a baseline reference guide on the various regulatory frameworks. “Our working group is waiting on the technical group's draft from use cases. The technical subcommittee is working with vendors and policy leaders on the requirements needed to govern data at the attribute level rather than "information." We are working through some tough scenarios to protect privacy and improve data liquidity with education, mental health, substance use, employment, housing, health care, and public health use case.”
c. **EdSpex** Education Security and Privacy Exchange (Edspex), a nonprofit collective of individuals and organizations passionate about our future and aware of the risks of data misuse. We have aligned many principles and guidelines under a common objective, represented in open and free program resources for schools, districts, vendors, and communities.
This document: http://bit.ly/2VRgxYw

e. Meetings: On hiatus awaiting completion of technology working group and will convene in Berlin for face to face meeting in October. Contact: marsalih@gmail.com

14. SCORM maintenance (SCORM Renew). Andy Johnson
   a. 1484.12.1 (metadata) will proceed to balloting soon. We will circulate the old standard with a cover letter explaining why no changes have been made to this broadly adopted standard.
   b. We are looking for IEEE members who can participate in the ballot. Please contact Andy, andy.johnson.ctr@adlnet.gov.
   c. Website: http://sites.ieee.org/scormrenew/
   d. 1484.11.3 (runtime environment) has been allowed to expire
e. Additional SCORM-related standard expirations this year
   i. P1484.11.2, ECMAScript Application Programming Interface for Content to Runtime Services Communication
   ii. P1484.12.1, Standard for Learning Object Metadata (LOM)
   1. Will this work happen in SCORMRenew or in the LOM WG?
f. Next meeting: TBD

   Shelly Blake-Plock
   a. The next 4 months will produce a “proceedings” and proposals for post-ICICLE activities for the community of learning engineers. Digital proceedings in December.
   b. All ICICLE 2019 attendees can submit materials for the proceedings. Please contact Shelly if you intend to submit something.
   c. Michael Jay will take over as Chair on December 17th.

   “Standard for the Classification of Adaptive Instructional Systems. This standard defines and classifies the components and functionality of adaptive instructional systems (AISs). This standard defines parameters used to describe AIS and establishes requirements and guidance for the use and measurement of these parameters.”
b. Monthly teleconference every 2nd Thursday at 10:00am eastern. Next meeting 12 September. All interested parties should sign up here to get meeting reminders and posts: http://sites.ieee.org/sagroups-2247-1/members

c. P2247.1 Subgroup focused on Conceptual Modeling led by Anne Knowles, L3Harris Technologies (aknowles2nd@gmail.com).
   i. To view current draft of the AIS subgroup’s approach to the conceptual model standard, request access to IEEE Collabratec’s “AIS 2247.1” workgroup
      https://ieeecomputer.org/app/workspaces/5860/AIS-P2247-1/activities.
   ii. From the PAR: This standard enables producers of AIS to describe the overall operation of an AIS; to specify its approach, method, and level of adaptation; and to identify the methods used to implement specific components and interfaces. This standard enables consumers of AIS to make comparisons to inform purchasing and deployment decisions and serves a reference for technical standards that support the exchange of data among AIS and between AIS and other education and training systems. This standard incorporates and promotes the principles of ethically aligned design for the use of artificial intelligence (AI) in AIS.
   iii. Anne is seeking access to official IEEE-SA Dictionary to compare against P2247.1 multi-page ontology definitions before sharing with other AIS subgroups; apparently dictionary has limited access.

d. P2247.2 Subgroup focused on Interoperability led by Richard Tong, Yixue Squirrel AI learning

e. P2247.3 Subgroup focused on recommended practices for AIS evaluation subgroup will be led by Shelly Blake-Plock

f. A new Adaptive Instructional Systems (AIS) conference under the auspices of Human-Computer Interaction International (HCII) was approved. The conference will serve as a venue for one of the two annual face-to-face meetings for the AIS working group and provide broader international exposure for IEEE standards.
   i. The first approved AIS conference was held in Orlando, Florida at the Walt Disney World Swan and Dolphin Resort, Orlando (26–31 July 2019). First AIS International Conference on Adaptive Instructional Systems: http://2019.hci.international/ais; 52 papers (10 sessions) were approved for presentation at the HCII AIS conference. Thank you to all the the LTSC contributors to this conference. We encourage you all to participate.
   ii. The second AIS conference will be in Copenhagen, Denmark at the AC Bella Sky Hotel and Bella Center (19–24 July 2020). ~20 parallel sessions have been proposed and are seeking submissions.
g. We received approval for an IEEE Learning Technology Track at IITSEC in Orlando, FL in early December. It is composed of three AIS-associated special events on Conceptual Modeling, Interoperability Standards, and Recommended Evaluation Practices for AISs. The fourth special event in this proposed track is on learning engineering.

h. We are still searching for some subgroup region leaders (Conceptual Modeling, Interoperability Standards, and Recommended Practices for AISs) in Asia-Pacific, Americas, and Europe-Africa to stimulate face-to-face meetings in each region. International conferences like HCII and AIED are being used to facilitate interaction between regions.

i. Due to the interest in AIS technology in China, the working group is exploring ways to create an affiliated group in Asia. Contact Xiangen Hu, Asia-Pacific Regional Leader for AIS Conceptual Modeling, if you are interested: xhu@memphis.edu


   a. This is an entity-based working group. A face-to-face meeting was held in Macau in association with IJCAI.


   d. Participants include: WeBank, Sinovation Ventures, China Telecom, Xiaomi, Squirrel AI, JD, Clustar, 4Paradigm, Intel, LogicOcean, IBM, Zoke. 8 entities - WeBank, Sinovation Ventures, China Telecom, Squirrel AI, JD, Clustar, 4Paradigm LogicOcean - presented their outline draft.

   e. Report on Macau meeting, 11 August

   f. Website: https://sagroups.ieee.org/3652-1/

   g. Interested representatives of IEEE corporate members should contact: Ya-Ching (Angelica) Lu, angelica.lv@clustar.ai

14. P3527.1 Digital Literacy, Skills, and Readiness

   a. This is an entity-based working group.

   b. Event in NY. “Building Global Standards for Digital Intelligence” session, Hosted by DQ Institute, IEEE SA and World Economic Forum, 10 October 2019, 8:30am to 4:00pm EDT, World Economic Forum, 350 Madison Avenue, New York, NY. This session will cover how IEEE is raising the standard for Digital Intelligence through its open, collaborative standards development process and global standards projects. Standards work that will be covered includes: a project that
is establishing a global standard, based on the DQ Institute’s Digital Intelligence Framework, to ensure that digital literacy and competency efforts are coordinated globally; a project for an Age Appropriate Digital Services Framework, based on the 5Rights Principles for Children, that is establishing a framework for developing age appropriate digital services where users are children; and a project for Child and Student Data Governance, that is defining specific methodologies to help users certify how they approach accessing, collecting, storing, utilizing, sharing and destroying child and student data.

c. Interested representatives of IEEE corporate members should contact the Chair, Dr. Yuhyan Park, park@dqinstitute.org.

d. Restarting the WG. Also starting an Industry Connections activity on “Digital Intelligence.”

15. INACTIVE: xAPI TAG. Shelly Blake-Plock
   a. On hiatus awaiting completion of WG9274 work on 9274.1.
   b. Master draft of xAPI 1.0.3 report for technical implementers is available here.
   c. Tech report -- Recommended practice for xAPI implementation -- submitted as a recommended practice standard.
      i. PAR accepted and this will be 9274.4.1. Work will begin after the completion of work on 9274.1.
   d. xAPI Archive work will commence post-ICICLE.
   e. Considering another tech report on xAPI profiles best practices P9274.4.2, along with work on the next PAR, P9274.2, about profiles. We’ll likely follow the model of .1 followed by .4.
   f. Contact Shelly Blake-Plock shelly@yetanalytics.com. See www.tagxapi.org for meeting details and connection information.

19. Next LTSC monthly meeting date:
   a. The LTSC meets on the second Tuesday of the month to discuss progress and problems across all the projects. Our next LTSC meeting will be Tuesday, October 8th at 9:00am Eastern Time.
Tolchirp format (Spoken Language Interest Group)

Topic-Lesson-Choice-Response-Result-Prompt (TLCRP or TLCRRP) "tolchirp" format version 0.5, mediatype text/tlcrp. It is not YAML but is similar:

// example

%tlcrp // or %tlcrrp or %tolchirp or %tolchorrp or %tolchorp
topic: tolchirp example
level: 1 // CEFR A1
lesson: format
  level: 6 // CEFR C2
  choice: Are you enjoying the demonstration?
    media: beep.mp3
    mediatype: audio/mp3;text=filename
    response: {affirmative}
    result: good
    response: {negative}
    result: bad
    response: what
    result: Are you enjoying the demonstration?
    freeform: true
  choice: good
    media: Excellent!
  choice: bad
    media: I'm sorry to hear that.
prompt: {affirmative}
  words: yes|yeah|sure|ok|fine|ja|si
prompt: {negative}
  words: no|nah

// format

[%tlcrp] // this text following two slashes is a comment

topic: text [{name}] // text with optional name in braces
  level: _ // 1 means A1, 6 means C2

lesson: text [{name}] // text with optional name in braces
  // optional level (default is topic's)

  choice: question [{name}] // text with optional name in braces
This document: http://bit.ly/2VRgxYw

// body of choice unnecessary if same text (and name) is defined elsewhere
// optional activity (text e.g. "assignment <URL>"), disabled (true/false),
// media (text, file descriptor or base64), mediatype, and level

response: prompt display text [{name}]
  result: [choice question text and/or name] // final state if missing
  // optional terminal (true means next choice is last; default is false),
  // activity (e.g. "assignment <URL>"), action (e.g. "[%python\n]..."),
  // plus as below for unnested prompts.
  [response...]
  [choice...]
  [lesson...]
  [topic...]

// optional unnested items:

topic: text [{name}]
  level: _ // 1 means A1, 6 means C2
  lesson...

lesson: text [{name}]
  // optional level (default is topic's)
  choice...

choice: question [{name}]
  // body of choice unnecessary if same text (and name) is defined elsewhere
  // optional activity (text e.g. "assignment <URL>"), disabled (true/false),
  // media (file descriptor or base64), mediatype, and level
  response...

response: prompt display text [{name}]
  result: [choice question text and/or name] // final state if missing
  // optional terminal (true means next choice is last; default is false),
  // activity (e.g. "assignment <URL>"), action (e.g. "[%python\n]..."),
  // plus as below for unnested prompts.

prompt: display text [{name}]
  // optional language (default: en), words (default from display text),
  // media (file descriptor or base64), level, phonemes (default from words),
  // and freeform (default is false: no keyword spotting)

// schema

Please see https://phabricator.wikimedia.org/F30248764

#!/usr/bin/env python3
import dataset
from sqlalchemy.types import *
...
from autocorrect import spell
from itertools import product
from sklearn.svm import SVC
from sklearn.model_selection import cross_val_score, KFold, cross_val_predict
from numpy import asarray

connect_string = 'postgresql://jsalsman@sctest?host=/var/opt/gitlab/postgresql'

def create_database(dbname='sctest', clobber=False):
    db = dataset.connect(connect_string)
    t = db['users']  # makes primary key autoincrementing integer 'id'
    t.create_column('email', String(length=100))

// table format

<table>
<thead>
<tr>
<th>Topic</th>
<th>Lesson</th>
<th>Choice</th>
<th>Response</th>
<th>Result</th>
<th>Prompt</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tolchorrp</td>
<td>Format</td>
<td>Are you enjoying the demonstration?</td>
<td>{affirmative}</td>
<td>Good</td>
<td>yes,</td>
</tr>
<tr>
<td>example</td>
<td>Level 6</td>
<td>Beep</td>
<td>audio/mp3</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| Good        | Excellent! |
| Bad         | I'm sorry to hear that. |
| What        | Are you enjoying the demonstration? |
| Freeform    | {negative}  | Bad            | no|nah |
