IEEE AESS Magazine Plans 2011-12

BoG Meeting

Princeton, NJ

Sept 2011

Overview

- Current Status of the Tutorials
- Current Status of the Magazine
- Plans forward for the Magazine

Tutorials

- Tutorial VI is still awaiting content
- Five papers awaiting revisions:
  - Poisson Point Processes
  - Joint Probabilistic Data Association Filter
  - Range-Based Positioning Algorithms
  - Prognostics and Health Management (significant revisions)
  - Cognitive Systems Engineering (major revisions)
- Four commitments for papers:
  - Aviation Information, Communications and Network Security
  - Graph Methods for Information Fusion
  - ATR Theory
  - Sonar Tracking
- Actively soliciting papers
  - Open call for papers
  - Need to consider joint online tutorials and tutorial papers
  - Any suggestions for topics and authors?
- Looking for a replacement editor

Citation Count - Tutorial

Tutorial	Year	# Papers	Average	High
V	2010	3	11.7	22
IV	2007	3	7	17
III	2006	3	26	44
II	2005	5	65.8	156
I	2004	4	110	214

- Predominance of radar and tracking papers
- Other topics – power, detection/classification, sensor networks, biometrics, and navigation
- Need to reinvigorate Tutorials with fresh topics

Quality Matters!

Space and Electronics Sy

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Magazine Status Currently

- Purpose
- October issue going to print
  - Pioneer Award on Cover (Jim Leonard)
  - No contributions from e-journal
- Fifty-four manuscripts pending
  - Issues need to be resolved regarding finding and assigning reviewers (half manuscripts held up because of this)
- Updated reviewer / search data base in e-journal
  - Key word search and organization updated by Shirley Cheng (AE)
  - Investigating opportunities for improvement of motivated individuals
  - Combine with Trans or other data bases?
- Added upcoming transaction papers in magazine
- Including more special issues and interview articles
  - Special Issue on Passive Radar (PCL) Upcoming
    - Guest editors Kushel and Farina
    - Still accepting papers
  - Interview article planned of Alfonso Farina by Maria Greco (AEIC)

Magazine

- Monthly telecons with Pubs and SMEB
  - Review upcoming issue content as well as
  - AE status
- Adding book review section
  - Considering nominations/volunteer for Book Review editor
- Created / updated guidelines for submission of various contributions
  - Guidelines for authors
  - Guidelines for book reviews
  - Guidelines for Harry Mimno award
  - Need to continue this
- Updating operating plan
- Developing a succession plan for EIC/AEICs
  - Includes development of Harry Mimno award nomination guidelines
  - Continuing access to IEEE Xplore
  - Google (and other) Scholar search engines for statistics tracking

Citation Count – Magazine

Magazine Year	# Papers	# Papers Cited	# Citations Total	Max # Cit per Paper
2010	87	25	79	22
2009	86	34	154	25
2008	123	29	148	18

•48 pages per issue
•12 issues/year (includes tutorials)
•Longer papers in 2009-10

- Magazine isn't necessarily well characterized by citations (meant not just for research) but this does show magazine is getting referenced
- Included radar, sonar, automotive, wireless comm, maritime border control, small business technology infusion, aircraft noise monitoring, system engineering environments...
- However, maximum citations typically come from radar papers (radar community may be more familiar with magazine currently?)

Quality Counts

Progress Since 2010

- 10 *New* Associate Editors in Various Areas of Specialty
- Associate EIC designated for succession plan
  - Maria Sabrina Greco
- Reviewed Industry feedback summary and Magazine feedback summary results to identify areas for improvement
- Requested magazine layout quote from Allen Press
- Archived magazines available for download on AESS website
  - Need to get word out and make more Visible on website
- Began requiring that all papers go through E-journal in order to track them and monitor statistics for ourselves and TAB Review Board
  - Including News and Information going to Susanne Walsh and Dave Dobson
  - Bill Walsh is starting to support Susanne Walsh with administrative duties allowing Dave to begin to step back some

IEEE Aerospace and Electronics Systems Magazine

Path Forward – What we DO know

- 4 Major Focus Areas for Improvement
  - Appearance, Selection of Material, Technical Quality, Reviewers
- Improve magazine **appearance**
  - Cover, paper, style, art, color figures
  - Prepare an AoA for trades to support budget
- Improve manuscript/article **selection** process
  - Transition from 80/20 hand selected vs ejournal to 20/80
  - Reduce workload of admin, less "conf only papers"
  - Improve tracking capability
  - Ensure papers included have been reviewed appropriately according to IEEE standards (a formal review process)
  - BoG need to recommend/submit at least one paper per year

Path Forward – What we DO know

- Improve magazine **technically**
  - Editorial board seeks out interesting papers
  - Including book reviews
    - Need book review editor
  - Invite papers from well respected researchers and practitioners
  - Ensure clear and concise guidelines for submissions (post on website and in e-journal)
  - Include interview articles (ex. Cary Spitzer, Alfonso Farina, Fenner Milton, Ron Driggers)
- Improve e-journal **reviewer** database by getting new and motivated reviewers (current database is antiquated)
  - *All BoG members are being added as reviewers* (we appreciate your support!)
  - Authors will be automatically submitted to reviewer database
  - Mature graduate students can be reviewers
  - Must make sure we recruit referees who understand and appreciate the publication process
  - Can we take advantage of SAMIEEE

Path Forward – What we DO know

- BoG involvement is critical
  - Reviewing magazine articles and content
  - Writing articles
  - Recruiting articles
  - VPs providing reports on their areas at least one a year
  - Presidential message on a regular basis (perhaps in each issue)
  - Reports from Technical Panels twice a year
  - Chapter activity reports
  - Recommend that Exec VP take on responsibility of Editor for Society News *(Bob Lyons supports whole heartedly)*

Path Forward – What we do NOT know or understand completely

- What is our trade space?
- Society magazine budget (constraints, limitations)
  - We have seen but do not fully understand
- Driving costs of the magazine
  - What is our current major cost?
    - Layout, Printing, Mailing?
  - What would be costs with Allen Press

So What Are Some Options?

1. No change in periodicity of hardcopy but make electronic versions available (like Spectrum) and improve appearance

   - 48 pages, 12 issues per year plus tutorials and historical articles
   - Transition to Allen Press
   - Color figures and cover, all digital (no scanning of figures), lighter paper, smaller text

2. Hard copy only with the above improvements

3. No hardcopy, only electronic

   - Newer generation comfortable with this but previous not as much

IEEE Aerospace and Electronics Systems Magazine

So What Are Some Options?

4. Bi-monthly option A

   - Magazine stays same size (48 pages, 6 issues)
   - Workload, printing, and mailing costs are possibly reduced
   - Physical content to readers is decreased

5. Bi-monthly option B

   - Magazine size doubles (96 pages, 6 issues)
   - Workload and printing costs remains same
   - Mailing costs are reduced
   - Physical content to readers stays same

Publication Recommended Path

- In a perfect world (no constraints on any resources – budget, time, manpower) -> Pubs would recommend Option #1

- Unfortunately, not a perfect world so we need to trade costs vs improvements
  - Solicit advertisers?
  - Print fewer extra issues (reduces number of issues sent to potential chapters, conferences, etc) ?
  - Fewer issues?, Fewer pages?
  - Min(budget) while Max (appearance)

- Optimization can go on forever but that is NOT our plan...Sometimes an 80% solution is good enough

- Plan to:
  - Collect info from board and Allen Press
  - Draw a line in the sand
  - Provide a single path forward
  - Path must be feasible (implementable) by 2013
  - Optimize appearance without exceeding the budget
  - Present "good" solution no later than spring BoG meeting

Allen Press Quote Items

- General administration?
- Article selection outside of e-journal (i.e. confs from IEEE Xplore)
- Typesetting
- Selection and/or creation of Cover Art related to magazine article
- Printing/Production (number of issues, page count, cover costs)
- Paper type
- We are looking for something similar to Instrumentation and Measurement Magazine

Instrumentation and Measurement Magazine is a Great Example

- Already supported by AESS in conjunction with the IEEE Instrumentation and Measurement Society
- Managed by Allen Press
- Advertisement sales handled by Allen Press
- Has 8 advertisement pages in August 2011 issue
- 64 light pages vs 48 heavy pages (current AES mag)
- Color figures
- Cover related to paper in the magazine
- Small characters -> more information
- Let's use this as a baseline and go from there

IEEE Aerospace and Electronics Systems Magazine

- Lance moves that the Pubs Team provide an analysis of alternatives by February 2012 to analyze the cost/benefit of various options for the Magazine, i.e., number of pages, advertisements, and number of issues; and provide a recommendation from those options.

Backup

IEEE Aerospace and Electronics Systems Magazine

For Reference

- http://ieee-aess.org
- http://sysaes.msubmit.net

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- Magazine topics appear to be interesting and diverse in general
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