EiC Report on IEEE Trans. IT

H. Bőlcskei

July 1, 2012

Many thanks to Michael Lerjen, Priska Schlumpf, and Alison Larkin
Thank you

I am deeply grateful to the EEB:

- G.D. Forney Jr.
- S. Shamai (Shitz)
- A. Vardy
- S. Verdú
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## AEs retired since July 2011

<table>
<thead>
<tr>
<th>Name</th>
<th>Start</th>
<th>End</th>
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<tbody>
<tr>
<td>Matthew G. Parker</td>
<td>12/08</td>
<td>11/11</td>
</tr>
<tr>
<td>Elza Erkip</td>
<td>01/09</td>
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<td>Nam Yul Yu</td>
<td>01/09</td>
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<td>Marco Lops</td>
<td>03/09</td>
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<td>Aris Moustakas</td>
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<td>Sekhar Tatikonda</td>
<td>10/09</td>
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<td>Roy D. Yates</td>
<td>03/09</td>
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<td>Mario Blaum</td>
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<td>Erchin Serpedin</td>
<td>04/09</td>
<td>03/12</td>
</tr>
<tr>
<td>Massimo Franceschetti</td>
<td>05/09</td>
<td>05/12</td>
</tr>
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</table>
New AE appointments

Signal Processing
- Yi Ma, UIUC
- Venkatesh Saligrama, Boston University

Communication Networks
- Devavrat Shah, MIT

Shannon Theory
- Aaron B. Wagner, Cornell University
State of the Transactions
Number of papers submitted
Page count and papers submitted overlay

Projected growth rates:
- 47%
- 65%
- 16%
- 39%
Page count and papers submitted overlay

- Papers submitted (x6)
- Page count

Projected growth:
- +47%
- +65%


2000 3000 4000 5000 6000 7000 8000 9000

0 1000 2000 3000 4000 5000 6000 7000 8000 9000

9 / 32
Page count and papers submitted overlay

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The increase

Where does the 39% increase between 2009 and 2011 come from?
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- Cleaning out of Pareja papers (had papers submitted in 2001)
Avg. # pages/published paper

projected

no more “correspondences”
Acceptance rate
The Acceptance Rate

(Courtesy A. Vardy)
Further observations and facts

- Submission of final material → Print: ~ 3.5 months
- No special issues in 2012 and 2013
- Arrival rate of final papers seems to have decreased
Statistics and some self-adulation

- 24% accepted
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- 18% in revision
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\[ \sim 38\% \text{ acceptance rate} \]
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- Sub-to-first-decision: 173 days (excluding fast rejects)
- Sub-to-first-decision: 157 days (including fast rejects)
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  Sub-to-first-decision: 157 days (including fast rejects)
- Trans. IT is the most cited of all IEEE journals and has the highest eigenfactor of all journals in EE, CS, and applied math
Areas where we are losing ground

Complexity & Cryptography

Editorial policy:
Submissions in the editorial area of cryptography will be accepted for review only if they relate to information and/or coding theory or are clearly outstanding contributions to cryptography.
Areas where we are losing ground

Quantum information theory

Testimonials:
“The IT Trans. still get good papers in the area but no longer set the agenda in the field.”
• ~100 papers left

• System is unstable:
  • Server frequently down
  • Disk space issues
  • Database was messed up

• Need to ramp down
Production process

- Remains a pain and expensive
- Explored alternatives outside IEEE $\rightarrow$ Alon’s report
- Currently testing an alternative approach within IEEE, with the help of S. Moser
5-Year Review
Remarks from the committee

“It seems that there were a number of issues, related to timeliness, during the last five years but a sincere effort from the Society to:

a) improve deliverance, and

b) address all pertinent issues.”
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Remarks from the committee

“The impact factor has been outstanding. Care should be taken so that the observed downward trend in the last two years does not damage the reputation of the Transactions.”
Impact factor
“One weakness is the rather lengthy review process. The Transactions needs to have a strategy to reduce the time taken from submission to publication. If needed, the Society’s leadership may need to continue increasing the page budget in order to further reduce the publication time of the papers in the queue to achieve its goal.”
“It is recommended that the Editorial Board determines the reason for the excessive delay from final acceptance for publication (production queue) and take corrective measures.”

“It is recommended that the Society’s leadership continue increasing the page budget in order to further reduce the publication time of the papers in the queue.”
Recommendations from the committee

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Aims and scope
The IEEE Transactions on Information Theory publishes papers concerned with the transmission, processing, and utilization of information. While the boundaries of acceptable subject matter are intentionally not sharply delimited, its scope currently includes Shannon theory, coding theory and techniques, data compression, sequences, signal processing, detection and estimation, pattern recognition, learning and inference, communications and communication networks, complexity and cryptography, and quantum information theory and coding. IEEE Transactions on Information Theory papers normally contain a strong conceptual and/or analytical contribution.

Discussion by email and vote at ITW
5-year review: Further comments

- Do we want to formalize the appeals procedure and put it in writing?

- Should authors be given a chance to appeal the EiC’s final decision to the IT Society president? / to a VP Pubs?

- Formalize Transactions reporting structure, how to assess needs of readership, guest editors, duties of EEB members, EiC training, AE training, AE reappointments

Discussion by email and vote at ITW
Sub-to-pub
Sub-to-pub seems recalcitrant

average: 90.8 weeks
Reviewer discipline

- Huge problem: Reviewer discipline
- EiC now sends reminders to reviewers directly
Further addressing sub-to-pub

“In view of its concerns about excessive reviewing delays in the IT Transactions, the BoG authorizes the EiC in his sole judgment to delay publication of papers by authors who are derelict in their reviewing duties.”

I am asking the BoG to endorse this
Thank you
Impact factor

In a given year, the impact factor of a journal is the average number of citations received per paper published in that journal during the two preceding years. For example, if a journal has an impact factor of 3 in 2008, then its papers published in 2006 and 2007 received 3 citations each on average in 2008. [Source: Wikipedia]