# ANNUAL REPORT TO MEMBERSHIP

## TECHNICAL COMMITTEE ON REAL-TIME SYSTEMS

**REPORT SUBMITTED BY:** James H. Anderson

## KEY VOLUNTEERS (PLEASE LIST YOUR TC’S ExCom AND ANY OTHERS)

<table>
<thead>
<tr>
<th>Role</th>
<th>Name, Email</th>
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<tbody>
<tr>
<td>Chair</td>
<td>Prof. James Anderson, University of North Carolina at Chapel Hill, USA, <a href="mailto:anderson@cs.unc.edu">anderson@cs.unc.edu</a></td>
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<td>Prof. Chenyang Lu, Washington University, USA, <a href="mailto:lu@wustl.edu">lu@wustl.edu</a></td>
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<td>Prof. Steve Goddard, University of Nebraska-Lincoln, USA, <a href="mailto:goddard@cse.unl.edu">goddard@cse.unl.edu</a></td>
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<td>Treasurer</td>
<td>Prof. Karl-Erik Årzén, Lund University, Sweden, <a href="mailto:karlerik@control.lth.se">karlerik@control.lth.se</a></td>
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<td>Assistant Treasurer</td>
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<tr>
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<td>Diversity Subcommittee Chair</td>
<td>Dr. Liliana Cucu-Grosjean, INRIA, Paris-Rocquencourt, FRANCE, <a href="mailto:liliana.cucu@inria.fr">liliana.cucu@inria.fr</a></td>
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<tr>
<td>Awards Subcommittee Chair</td>
<td>Prof. Tei-Wei Kuo, National Taiwan University, Taipei, Taiwan, <a href="mailto:ktw@csie.ntu.edu.tw">ktw@csie.ntu.edu.tw</a></td>
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<td>Awards Subcommittee Member</td>
<td>Prof. Sanjoy Baruah, University of North Carolina at Chapel Hill, USA, <a href="mailto:baruah@cs.unc.edu">baruah@cs.unc.edu</a></td>
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<td>Industry Outreach Subcommittee Chair</td>
<td>Prof. Rolf Ernst, Technical University of Braunschweig, Germany, <a href="mailto:ernst@ida.ing.tu-bs.de">ernst@ida.ing.tu-bs.de</a></td>
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<td>Industry Outreach Subcommittee Member</td>
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<td>Conference Planning Subcommittee Chair</td>
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<td>Conference Planning Subcommittee Member</td>
<td>Prof. Frank Mueller, NC State University, USA, <a href="mailto:mueller@cs.ncsu.edu">mueller@cs.ncsu.edu</a></td>
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<td>Conference Planning Subcommittee Member</td>
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<td>Conference Planning Subcommittee Member</td>
<td>Prof. Chenyang Lu, Washington University, USA, <a href="mailto:lu@wustl.edu">lu@wustl.edu</a></td>
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2015 PROGRESS REPORT & PLANS

Please enlist your membership’s participation in your plans for the coming year by suggesting upcoming opportunities for Volunteer involvement.

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<th>ACTIVITY AREA</th>
<th>2015 ACCOMPLISHMENTS</th>
<th>2016 PLANS</th>
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| **Highlights:** Highlights of the past year, and special plans underway for the coming year. Indicate if you’d be interested in formally sharing your success stories with other TC Chairs at an upcoming CS TAC meeting. | The TCRTS made the following accomplishments:  
- Sponsored and co-sponsored five conferences (RTAS, ICCPS, RTSS, RTCSA, and CPSNA).  
- Gave Service Awards to PC Chairs and General Chairs of RTAS 2015 and RTSS 2015.  
- Gave the yearly Outstanding Technical Achievement and Leadership Award to Prof. Krithi Ramamritham for his research contributions to Real-Time Systems. | Conduct an online survey of the TCRTS community concerning the logistics and planning of our conferences to get a better sense of cost-cutting opportunities.  
  - Will be led by a new Cost-Cutting Subcommittee.  
- Devise new policies for increasing diversity.  
  - Will be led by a new Diversity Subcommittee. |

| **Conferences:** Describe TC’s sponsorship, co-sponsorship, or co-operation of conferences. Include any planned launches or discontinuations. Did the TC actively participate on any program committees, technical committees, or steering committees of these conferences? | The TCRTS has sponsored the following two conferences:  
- RTAS 2015: The IEEE Real-time and Embedded Technologies and Applications Symposium. | The TCRTS will sponsor the following conferences:  
| | The TCRTS has co-sponsored the following conferences:  
- CPSNA 2015: The IEEE International Conference on Cyber-Physical Systems, | The TCRTS will co-sponsored the following conferences:  
- CPSNA 2016: The IEEE International Conference on Cyber-Physical Systems, |
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<tr>
<th><strong>Communication</strong></th>
<th><strong>Networks, and Applications.</strong></th>
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| *Describe your TC's communications strategy (including frequency) with your membership (e.g., newsletters, listservs, blogs, Twitter, Facebook, letter from the Chair, Web portal, etc.) Include info on how to subscribe. Any updates or changes completed or planned for the coming year?* | Communication took place through emailed newsletters, general body meetings at RTSS, and the TCRTS website. Newsletters usually are issued in association with conferences and special announcements. For example, we recently had to relocate RTSS 2016 from Salvador, Brazil because of the Zika virus situation, and a special announcement went out because of that. The TCRTS website has been located at: http://sites.ieee.org/tcrtss/. The TCRTS website also contain some wiki’s for EC members to post internal discussions. | Communication will take place through:  
- Newsletters.  
- General body meetings at RTSS.  
- TC website.  

TC website: http://sites.ieee.org/tcrtss/.  

**Communication Coordinator:**  
Name: Prof. Harini Ramaprasad  
Email: hramapra@uncc.edu  

**Opportunities for Volunteer Involvement:**  
Prof. Ramaprasad is assisted by Prof. Björn Brandenburg, Communications Coordinator for Europe, and Prof. Shinpei Kato, Communications Coordinator for Asia. |
| **Meetings: Any TC meetings held/planned? At what venue (at conferences, teleconferences, videoconferences?)?** | A General Body meeting of the TC members took place in December at the IEEE Real-Time Systems Symposium (RTSS 2015), in San Antonio, Texas. The TC Executive Committee also met at the venue above, and stayed in contact via email, and through the TCRTS website. | A General Body meeting of the TC members will take place at the IEEE Real-Time Systems Symposium (RTSS 2016), in Porto, Portugal. The Executive Committee will also meet at the venue above and will stay in regular contact via email and through the TCRTS website. |
### Publications: Sponsored publications or hosted special issues of a Computer Society magazine? Plans for one?

The top papers from RTSS were invited to IEEE Transactions on Computers, but this was not a formal special issue.

**Opportunities for Volunteer Involvement:**

The Executive Committee includes 15 people, all of whom are volunteers.

**We are exploring the possibility of having a formal arrangement with IEEE Transactions on Computers for inviting the best papers from RTSS and RTAS.**

**Opportunities for Volunteer Involvement:**

Marco Caccamo is championing this effort.

### Standards Committee Activities: Describe TC’s support of or participation in Standards-related activities.

Nothing to report.

**No activities planned.**

### Collaborative Efforts: Collaboration with other TCs, IEEE, or other groups or committees?

Collaboration took place between TCRTS and the sponsoring organizations of RTCSA and with ACM SIGBED for ICCPS.

**TCRTS will collaborate again with the sponsoring organizations of RTCSA and with ACM SIGBED for ICCPS.**

**Opportunities for Volunteer Involvement:**

Insup Lee, chair of ACM SIGBED, is involved here.

### Awards and Recognition: Describe your TC’s awards activities – given and planned.

The following awards have been given:

- Service Awards to PC Chairs and General Chairs of RTAS 2015 and RTSS 2015.
- Certificates of Appreciation to track chairs of RTAS 2015 and RTSS 2015.
- Outstanding Technical Achievement and Leadership Award to Prof. Krithi Ramamritham for his research contributions to Real-Time Systems. Prof. Sanjoy Baruah,

The following awards are planned:

- Service Awards to PC Chairs and General Chairs of RTAS 2016 and RTSS 2016.
- Outstanding Technical Achievement and Leadership Award to one of its members for significant research contributions to Real-Time Systems. The recipient will be invited to make a short presentation at the 2017 IEEE Real-Time Systems Symposium.
the recipient of this award in 2014, was invited to make a short presentation at the IEEE Real-Time Systems Symposium in San Antonio, Texas.

- Best Paper Awards at both sponsored conferences (RTSS and RTAS).

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<th>Concerns: Share your TC-related concerns with your members.</th>
<th>No serious problems encountered.</th>
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Opportunities for Volunteer Involvement:

*Reports will be posted on the TC’s Computer.org “Scope Page”.*