Dear Applicant,

It is our pleasure to invite you to attend an interview for a research student position in our department. The interviews will be held during the week of June 6–10, 2016, with each day having two sessions, beginning at 9 am and 2 pm, respectively. The exact date and session of your interview would have been communicated to you separately by the IISc Admissions section.

Our interview process consists of a written test, followed by an oral interview for candidates shortlisted in the written test. The attached note gives you more information and should help you to prepare well for the interview.

Please print out and fill up the attached Option Form, and bring it to the interview. To help you make informed choices in filling out the form, we encourage you to learn more about our activities by visiting the faculty and lab pages on the CSA web-portal (http://www.csa.iisc.ernet.in). Additional information is available at http://www.csa.iisc.ernet.in/academics/academics-prospectivestudents.php.

You are welcome to email the CSA admissions committee (admissions@csa.iisc.ernet.in) if you have further questions.

With best wishes,

Jayant R. Haritsa
Professor and Chair
Dept. of Computer Science and Automation
Indian Institute of Science, Bangalore.

---

Research Interview Process at CSA

- A **written test** of 30 minutes duration will be conducted at the beginning of the interview session.
  
  (a) There will be 10 short answer questions.

  (b) The syllabus for the written test is the GATE CS syllabus on the following topics: Engineering Mathematics (all subtopics included), Programming and Data Structures, and Algorithms.

  (c) You are expected to attempt all 10 questions.

- Based on your performance in the written test, you may be shortlisted to appear for an **oral interview** to be conducted in the same session.
- The **oral interview** is intended to test your aptitude and suitability for research in your chosen areas, as well as your proficiency in the related background subjects. The emphasis will be on testing your understanding of fundamental concepts. The oral interview will be structured as follows:

  (a) Please consult Table 1 and indicate in the **Option Form** (Page 3 of this note) your choice of one **Main Research Area** and at most two corresponding **Sub-Areas** of research from Column 2, in which you would like to do research. You must also indicate two corresponding **Background Subjects** from Column 3 in which you would like to be examined. A list of representative books for these background subjects is available at http://www.csa.iisc.ernet.in/academics/academics-prospectivestudents-books.php.

  (b) You will first be examined in your chosen background subjects.

  (c) This may be followed by more questions related to your choice of research sub-areas.

  (d) If you are an **External Registration Programme (ERP)** applicant, the oral interview will additionally include a 5 minute presentation on your proposed research area and problem. You would have already discussed the problem with your designated faculty advisor. In the interest of time, please keep your presentation short. Kindly note that projection facilities will not be available. You may bring along with you a one-page writeup to be circulated to the committee members.

- Please submit the filled-in **Option Form** (Page 3 of this note) when you report to the department office at the beginning of your interview session.

- Please note that in case you are admitted to the research programme, you will be expected to work on a research topic related to the sub-areas in which your interview performance is found satisfactory.

**Table 1: Research areas where positions are available, and corresponding background subjects**

<table>
<thead>
<tr>
<th>Main Research Area</th>
<th>Sub-Areas where positions are open</th>
<th>Background Subjects</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="http://www.csa.iisc.ernet.in/research-theory.php" alt="Link" /></td>
<td><img src="http://www.csa.iisc.ernet.in/research-compsystems.php" alt="Link" /></td>
<td><img src="http://www.csa.iisc.ernet.in/research-intellisystems.php" alt="Link" /></td>
</tr>
<tr>
<td><img src="http://www.csa.iisc.ernet.in/research-compsystems.php" alt="Link" /></td>
<td><img src="http://www.csa.iisc.ernet.in/research-intellisystems.php" alt="Link" /></td>
<td><img src="http://www.csa.iisc.ernet.in/research-theory.php" alt="Link" /></td>
</tr>
<tr>
<td><img src="http://www.csa.iisc.ernet.in/research-intellisystems.php" alt="Link" /></td>
<td><img src="http://www.csa.iisc.ernet.in/research-theory.php" alt="Link" /></td>
<td><img src="http://www.csa.iisc.ernet.in/research-compsystems.php" alt="Link" /></td>
</tr>
</tbody>
</table>
Please fill up this form and bring this with you at the time of the Interview.

1. Name of the Candidate:
2. Application No.:
3. Category: (SC/ST/OBC/GN):
4. Degree Applied for (M.Tech (Research) only / Ph.D only / Both):
5. Date of Interview:
6. Current Affiliation:
7. Highest Qualification:
8. Discipline of Highest Qualification:
9. Name of Institution where studied:
10. Marks/Grade Secured in the Highest Qualification:
11. GATE Score and Rank with Discipline and Year (if applicable):
12. Performance in other Examinations (JEST, NBHM, NET, JRF, etc):
13. Academic Achievements (include research publications; write overleaf if necessary):

14. Preference for research areas and background subjects:

<table>
<thead>
<tr>
<th>Main Research Area (Tick only one)</th>
<th>Sub-Areas</th>
<th>Background Subjects</th>
</tr>
</thead>
<tbody>
<tr>
<td>□ Theoretical Computer Science</td>
<td></td>
<td></td>
</tr>
<tr>
<td>□ Computer Systems and Software</td>
<td></td>
<td></td>
</tr>
<tr>
<td>□ Intelligent Systems</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

15. Signature: