Computer Science

CS 574 Randomized Algorithms  credit: 4 hours.
Basic and advanced concepts in the design and analysis of randomized algorithms. Sampling; concentration inequalities such as
Chernoff-Hoeffding bounds; probabilistic method; random walks, dimension reduction; entropy; martingales and Azuma's inequality;
derandomization. Randomized algorithms for sorting and searching; graphs; geometric problems. Basics of pseudorandomness and
randomized complexity classes. Prerequisite: CS 473; MATH 461 or STAT 400.

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<th>CRN</th>
<th>Type</th>
<th>Section</th>
<th>Time</th>
<th>Days</th>
<th>Location</th>
<th>Instructor</th>
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<tbody>
<tr>
<td>60442</td>
<td>Lecture</td>
<td>RA</td>
<td>12:30 PM - 01:45 PM</td>
<td>WF</td>
<td>1105 - Siebel Center for Comp Sci</td>
<td>Har-Peled, S</td>
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Credit Hours: 4 hours
Restricted to Graduate - Urbana-Champaign.