Rice University Summer Institute of Statistics
Research Program for Undergraduates
-- RUSIS --
May 17th – July 23rd, 2010

Length of Program

This is a 10-week summer program. The goal is to prepare undergraduate students for a graduate research career in the Statistical Sciences, especially those students from underrepresented minority groups. RUSIS will be held at Rice University, and students will have access to cutting-edge computational facilities and state-of-the-art teaching classrooms.

Eligibility

Undergraduate Students must be US citizens or Permanent Residents, and must not hold any undergraduate degree by the end of the summer of 2010. Students majoring in mathematics, computer science, statistics, or related fields and who have had the calculus sequence and a course in linear or matrix algebra are eligible to apply.

Amount of Award and Deadline for Applying

Students will receive a $4,000.00* stipend, plus up to $550.00 for travel expenses and a $880.00 payment towards summer rent. The deadline for applying is March 15th, 2010. Date for notification of acceptance is April 15th, 2010.
* Taxes may be deducted from this amount.

Typical Summer Schedule

RUSIS will start with courses in computation (e.g. S-plus, Mathematica, Latex) and probability, stochastic processes and statistical inference. The computation course will run for approximately 3 – 4 weeks. The courses will run
for 3 weeks and several ideas from extreme value theory, survival analysis, and multiple comparisons will be introduced. A typical schedule will look as follows:

<table>
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<tr>
<th>Monday – Thursday</th>
<th>Friday</th>
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<tbody>
<tr>
<td>9:30 – 12:00 Probability- stochastic processes – statistical inference course</td>
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<td>12:00 – 1:00 Lunch</td>
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<td>1:10 – 2:30 Computation short course by Graduate student</td>
<td>1:10 – 2:45 Distinguished Scientist Lecture Series</td>
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<td>2:45 – 4:00 Computation Homework Assignment under TA supervision</td>
<td>2:45 – 4:00 Meet as a group with mentors and TA to discuss various topics: improving program; projects; watch videos (Fermat’s last theorem); etc.</td>
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Tentative Invited Guest Lecturers for the 2010 RUSIS:

Luis Tenorio – Colorado School of Mines  
Anna Baron – University of Colorado, Denver  
Leonardo Dueñas-Osorio – Rice University

Research Projects

During the 4th week of the program, students will begin work in groups – assisted by the faculty – on statistical problems with applications on Extreme Value Theory, Multiple Comparisons, Multivariate Survival Analysis, and other biomedical and statistical problems. It is expected that the research work will lead to a presentation at a National meeting and when the work merits it, publication in a professional journal.

NOTE: There will be an opportunity to participate in a professional conference in Guanajuato, Mexico (CIMAT) during the summer. All expenses will be paid, but you will need to have the proper documentation to travel to Mexico and back into the United States. You will need to send proof of required documentation by April 15th. I cannot advise as to what the required documentation is. I recommend that you check with the proper authorities. If you are a minor, you will need to have written permission from your parents to travel to Mexico.
Applications --- Applications may be found at /www.stat.rice.edu/~jrojo

Or contact
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Supported through generous grants from:

The National Science Foundation and The National Security Agency