Rice University Summer Institute of Statistics
Research Program for Undergraduates
--RUSIS--
May 20\textsuperscript{th} – July 26\textsuperscript{th}, 2013

\section*{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.

\section*{Eligibility}

\textbf{Undergraduate} Students must be US citizens or Permanent Residents, and must not hold any undergraduate degree by the end of the summer of 2013. 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.

\section*{Amount of Award and Deadline for Applying}

Students will receive a $5,000* stipend, plus up to $600.00 for travel expenses. The program will provide lodging for students at the Rice Graduate Apartments. The deadline for applying is March 15\textsuperscript{th}, 2013. Date for notification of acceptance is April 10\textsuperscript{th}, 2013.

* Taxes may be deducted from this amount.

\section*{Typical Summer Schedule}

RUSIS will start with courses in computation (e.g. S-plus, Mathematica, Latex) and probability, stochastic processes and statistical inference. The
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:

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<tr>
<th>Monday – Thursday</th>
<th>Friday</th>
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<tbody>
<tr>
<td><strong>9:00 – 12:00</strong> Probability- stochastic processes – statistical inference course</td>
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<td><strong>12:00 – 1:00</strong> Lunch</td>
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<tr>
<td><strong>1:10 – 4:00</strong> Computation short course by graduate students</td>
<td><strong>1:10 – 3:30</strong> Computational short course by graduate students</td>
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<td><strong>4:00 – 5:00</strong> Computation homework assignments under TA supervision</td>
<td><strong>3:30 – 5:00</strong> Meet as a group with mentors and TA to discuss various topics: improving program; Graduate school; projects; watch videos (Fermat’s last theorem); etc.</td>
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Research Projects

During the 4th week of the program, students will begin research work in groups. Projects will be selected from areas including, but not limited to, 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 is of sufficient merit, to a publication in a professional journal.

Applications --- Applications may be found at [www.stat.rice.edu/~jrojo](http://www.stat.rice.edu/~jrojo)

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