Research for Undergraduates at Georgia Tech

Michael Lacey

Georgia Institute of Technology

November 9, 2004
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2. Examples of Research

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What is Research for Undergraduates

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- To get the most out the experience, self motivation is essential,
- You will need to learn background material by yourself, even to the point of mastering immunobiology.
Some Examples of REU topics

Ryan Hynd: Geometric Properties of Rotating Drops
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Brittany Hughes investigated Markov Chains on Aztec Diamonds. Worked with Professor Randall and graduate student Sam Greenberg.
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Thomas Callaghan ranked College Football Teams using random monkeys.
Some Examples of REU topics

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REU at GT
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Some Examples of REU topics

Steven Lansel, with Professors Mucha and Bunimovich, models billiard tables.
Some Examples of REU Topics

Configuration Space

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Leo Dachevski and Julie Bjornstad worked with Math and Biology Professors to model growth of plankton in oceans.
Some Examples of REU topics
Alan Diaz went to College Park Maryland to study Dynamics.
Some Examples of REU topics

Stephanie Cheung and Caroline Seabrook studies grade distributions at Georgia Tech, using important numerical techniques.
Senior Project (M4080/4090) for the BS Discrete Math Degree
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- REU program, running in the summer, funded for summer 2005, 06.

Other REU programs around the country (US citizens only)

The National Science Foundation has an up to date list of all such programs. Google "nsf reu" if you can't follow this embedded link.

Clark Alexander (02), Alan Diaz (04) and Jessica Snyder (04) have all done this.

GT has its own awards, available to ALL students. See the web site at undergraduateresearch.gatech.edu.
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## Student Enrollment in Undergrad Research Courses

**Table:** Undergraduates involved in REU related Coursework

<table>
<thead>
<tr>
<th></th>
<th>97</th>
<th>98</th>
<th>99</th>
<th>00</th>
<th>01</th>
<th>02</th>
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<td>Total participation</td>
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<td>25</td>
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<td>19</td>
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<td>4</td>
<td>3</td>
<td>8</td>
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<td></td>
<td>4</td>
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These numbers are computed on a calendar year basis.
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Admissions are made on a rolling basis. Plan accordingly!

You will need to have at least Analysis I/Algebra I before heading off to this or any other study abroad program.

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- But you (and your parents) should be adventurous travelers!
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You could be the first GT student to enroll in this program.
Yakov Kerzhner just focused on solving problems, and got very good at it. He is in graduate school at NYU.