High-Dimensional Data Analysis

National Science Foundation Research Research Experience for Undergraduates at Rose-Hulman Institute of Technology, Terre Haute, Indiana

Dates: June 1 – July 26, 2013 (eight weeks).
Location: Department of Mathematics, Rose-Hulman Institute of Technology.
Financial Support: $4000 for eight weeks, on-campus housing provided, meal allowance, travel funds up to $500 per participant, provided as needed.
Apply by: Friday February 22, 2013 (for full consideration)

The program will introduce twelve undergraduate mathematics students to the world of doing mathematical and statistical research, both on their own and in collaboration with others. Participants will use undergraduate mathematics and statistics (and beyond?) as well as computer software such as Matlab, Maple, SAS or R to real problems related to optical tomography, systems biology, and high-dimensional data analysis.

Participants:
- must be a citizen or permanent resident of the United States or its possessions.
- must be a full-time undergraduate student as of September 2013.
- must devote their full time to the program and not engage in any other course work or employment during the program.
- should have some background
  - in either analysis, differential equations, and/or linear algebra for the projects in optical tomography.
  - in real analysis and linear algebra for the projects in systems biology.
  - in basic statistics and linear algebra for the project in high-dimensional data analysis.
  - should have some experience in using a high level mathematical package or programming language.
- will be selected on the basis of demonstrated mathematical creativity, motivation, and good work habits as well as meeting the above requirements, as determined from the application materials and recommendation letters.

Female, minority and physically disabled students are encouraged to apply.

An application form and additional information on the program is available at the website

http://www.rose-hulman.edu/mathREU

or by contacting Allen Holder via phone, email or mail (see contact information). Questions about the program should also be directed to Allen Holder.

Contact Information
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