Position in Computational Optimization

**Employer:** Nature Source Genetics, Inc  
**Location:** Ithaca, NY  
**Date:** February 6, 2008

*Nature Source Genetics* ([http://naturesourcegenetics.com](http://naturesourcegenetics.com)) is a computational genomics company dedicated to the development and application of new algorithms designed to harness natural genetic variation in the improvement of plant species. Located in Ithaca, New York, NSG scientists interact with a team of distinguished faculty from Cornell University and other major research institutions, in problems related to population/quantitative genetics/genomics. This position will work with and support a team of scientists working in the areas of computational genomics, statistics, databases, software engineering, quantitative/population genetics and breeding.

The successful candidate would be expected to take the lead in the development of new computational solutions/algorithms for quantitative genetics, as well as participating in all activities of the company. On-the-job training in genetics will be provided (if needed), but applicants should have specific training in Operations Research, Computer Science, Applied Math, or a related field with a strong background in Optimization and Simulation. Knowledge of Statistics and/or Genetics would be a plus.

**Qualifications:**

- M.S./Ph.D. degree in: Operations Research, Computer Science, Applied Math, or related field.
- Strong background in optimization and simulation, both theoretical and practical
- Ability to work with staff scientists to formulate and model problems that can be addressed using Optimization and Simulation
- Knowledge and experience with specific software languages/packages including:
  - AMPL and CPLEX or related linear programming package
  - Object-oriented programming in Java or similar language
  - R and/or Matlab a plus
- Ability to work independently and in a group
- Strong interpersonal skills and demonstrated ability to effectively communicate with others

**Responsibilities**

- Working with the NSG management team, other NSG employees and the Scientific Advisory Board members in modeling problems in quantitative genetics and developing new algorithms and optimization tools.
- Participating in and/or overseeing software development related to
implementation of new algorithms and optimization tools; and

• Preparing scientific reports, publications and presentations that clearly convey progress and challenges, and coordinate activities leading to related scientific publications, presentations, and patent filings; and

• Attending and participating in research planning meetings with other NSG employees, the Scientific Advisory Board, and other scientists (both in academia and the private sector) related to various NSG projects

To Apply or Obtain More Information about this Position, Contact:

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