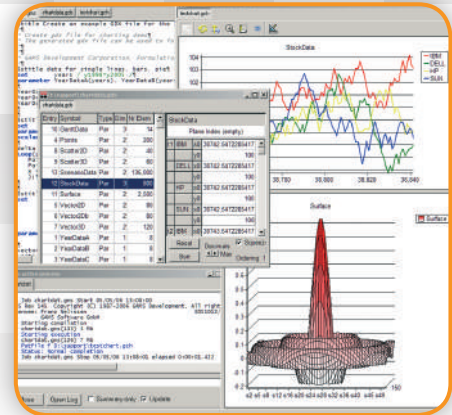


## High-Level Modeling

The General Algebraic Modeling System (GAMS) is a high-level modeling system for mathematical programming problems. GAMS is tailored for complex, large-scale modeling applications, and allows you to build large maintainable models that can be adapted quickly to new situations. Models are fully portable from one computer platform to another.

## State-of-the-Art Solvers

GAMS incorporates all major commercial and academic state-of-the-art solution technologies for a broad range of problem types.



GAMS Integrated Developer Environment for editing, debugging, solving models, and viewing data.

## Fields of Fuel - A Multiplayer, Web-based Simulation Game

A complex system of GAMS models is a centerpiece of this free web-based simulation game, which allows players to explore sustainability issues associated with bioenergy crop production. Biofuels and agronomic experts assisted in creating an accurate and realistic depiction of the system dynamics.



- Players take on the role of farmers working to sustainably grow crops as energy resources, earn income and improve ecosystem services.
- Automated 'bot' players communicate with the optimization models via the GAMS Java API to evaluate which options will maximize their overall game score.
- The game can be played in a variety of settings, but was primarily designed for use in high school and undergraduate classes.

For further information please visit <http://www.fieldsoffuel.org>  
or contact Steven Wangen - [srwangen@wisc.edu](mailto:srwangen@wisc.edu)