Job Title: Intern – Continuous Improvement Enterprise Optimization

Company Overview
United Airlines is a leading global carrier focused on being the airline customers want to fly, employees want to work for and shareholders want to invest in.

United is proud to have the world’s most comprehensive route network, and together with United Express we operate an average of nearly 5,000 flights a day to 342 airports across six continents.

Approximately 84,000 United employees reside in every U.S. state and in countries around the world. For more information, visit united.com, follow @United on Twitter or connect on Facebook.

Continuous Improvement and Enterprise Optimization
The objective of the Continuous Improvement and Enterprise Optimization group at United Airlines is to provide thought leadership and ground breaking research capabilities that challenge the status-quo, as well as to partner with the business units and delivery groups in order to create value through excellence in modeling and research. This group includes people with advanced degrees (MS or PhD) in Mathematics, Statistics, Operations Research and Engineering. The nature of work includes mathematical modeling, forecasting, scheduling, inventory theory, stochastic modeling, heuristic optimization, statistical modeling, financial modeling, data analysis and modeling, and game theory applications. The customer organizations include Aircraft Scheduling, Revenue Management, Technical Services (Maintenance), Crew Planning, Airport Operations and Operations Control Center.

Job Description

- Apply expertise in mathematical modeling, operations research, statistics, neural networks or forecasting areas.
- Work in one of several areas of focus including aircraft scheduling, revenue management, supply chain management, crew planning, operations or cargo.
- Interact with team leader to develop requirements and understand business problem related to a significant research problem of value to United. Formulate and define scope and objectives through research and fact-finding to develop or modify an existing complex model.
- Analyze data sources, integrity and trends to inform the analysis and forecasting work.
- Develop prototype to solve the research problem, validate the prototype results and benchmark benefits.

Critical Skills and Experience

- Knowledge of modeling toolkits such as SAS, GAUSS, OPL, CPLEX, VBA
- Ability to work in UNIX/LINUX platform with languages including C/C++, Java
- Creativity and innovative thinking in developing solutions to complex business problems
- Ability to document and present technical information from the business problem definition to the implementation stage in a way that effectively addresses varying levels of management and different audiences
- MS or PhD in Operations Research, Applied Mathematics, Statistics, Industrial Engineering or related discipline